

A BASIC LIST OF THE LAND MOLLUSCA OF AUSTRALIA—PART III.

By TOM IREDALE.

(Plates xii.-xiii.)

Family HADRIDAE (continued).

The previous section dealt with the Queensland forms allotted to this family with the northern New South Wales (Oxleyan Sub-Area) species. The present series associated in the same family belongs to the Euronotian Faunula, a few small species penetrating northward into the south of the Solanderian Area and desertwards into the Larapintine Area. Under the name *Thersites jervisensis*, a medley of species has been confused, and the only way out is to reinstate the many species named by early workers. They were much nearer the truth than the lumpers of a generation ago, and it is certain scores of forms will be later recognised, the exact value of the forms being at present unknown. It is very definite, however, that the names here allowed represent recognisable units, and that the variation is easily limited. A study of the geology and botany of the country is necessary in order to understand the species here recorded.

Genus MERIDOLUM Iredale, 1933.

1933. *Meridolum* Iredale, Rec. Austr. Mus., Vol. xix., p. 47, August 2. Orthotype, *Helix jervisensis* Quoy & Gaimard.

MERIDOLUM JERVISENSIS Quoy & Gaimard, 1832.

1832. *Helix jervisensis* Quoy & Gaimard, Voy. Astrol. Zool., Vol. ii., p. 126, pl. 10, figs. 18-21. Jarvis Bay, New South Wales. Mid New South Wales (coastal).

MERIDOLUM CORNEOVIRENS Pfeiffer, 1851.

1851. *Helix corneovirens* Pfeiffer, Zeitschr. für Malak., Vol. viii., p. 25, June. "San Nicolao", error = Mulgoa, New South Wales. Figd. Reeve, Conch. Icon., Vol. vii., pl. 194, sp. 1366, September, 1854.
1864. *Helix mabillei* Crosse, Journ. de Conch., Vol. xii., p. 285, July 1; id., Vol. xiv., p. 60, pl. i., fig. 6, January, 1866. "Oceanie" = New South Wales, fide Ancey, Journ. de Conch., Vol. lii., p. 295, December 25, 1904, from examination of type.
1868. *Helix mulgoae* Cox, Mon. Austr. Land Shells, p. 38, pl. i., figs. 3, 7, 7a, May. Mulgoa, near Penrith, New South Wales. Mid New South Wales (Mulgoa district).

MERIDOLUM MOROSUM Morelet, 1853.

1853. *Helix morosa* Morelet, Journ. de Conch., Vol. iv., p. 369, pl. xi., fig. 15, November 1. Moreton Bay, East Australia. South Queensland (coastal).

MERIDOLUM GILBERTI Pfeiffer, 1846.

1846. *Helix gilberti* Pfeiffer, Proc. Zool. Soc. (Lond.), 1845, p. 127, February, 1846. Darling Downs, N.S.W. (Gilbert) = Queensland.
1847. *Helix grayi* Pfeiffer, Mon. Helic. Viv., Vol. i., p. 134 (reviewed Zeitschr. für Malak., Yr. iv., p. 174, November, 1847), for *Helix*, Symb. Helic., pt. iii., p. 68, 1846, where Gray, New Zealand, pl. i., figs. 8-9, was cited, but this plate was never issued. East Australia. Figd. Syst. Conch. Cab. (Mart. & Chemn.), Bd. I., Abth. 12, *Helix*, pt. 2, p. 225, pl. 109, figs. 21-24, 1851 (Zeitschr. für Malak., Yr. viii., p. 104,

JAN - 3 1939

September, 1851, cites the plate from the Conch. Cab., but text at that date not issued) where "Coll. Gilbert" is added.

1929. *Hadra corneovirens* var. *ianthostoma* Cockerell, Journ. Conch., Vol. xvi., p. 321, July. Jennings, New South Wales. South Queensland (inland). Northern New South Wales (inland).

MERIDOLUM EXPEDITONIS COX, 1868.

1868. *Helix expeditionis* Cox, Mon. Austr. Land Shells, p. 37, pl. xviii., fig. 12, May. Tropical Australia (Mitchell). South Queensland (inland, north of preceding).

MERIDOLUM ASCENSUM sp. nov.

(Plate xii., fig. 1.)

This striking shell belongs to the *jervisensis-gilberti* series, but is very elevated with a height of 30 mm. to a breadth of 30 mm., all the other members being broader than high. The coloration is a greenish straw with a pale pink subsutural band, and a small reddish circumbilical patch. The columella is white, as the outer lip and inside of aperture, and strongly reflected entirely covering the umbilicus. The only sculpture is a fine even granulation throughout which continues on to the apical whorls. This lives on the lower Richmond River and all through that district.

Northern New South Wales (Lower Richmond River district).

MERIDOLUM EXOCARPI COX, 1868.

1868. *Helix exocarpi* Cox, Mon. Austr. Land Shells, p. 44, pl. ii., fig. 2, May. Cherry Tree Hill, Mudgee, New South Wales. New South Wales (Mudgee district).

MERIDOLUM DEPRESSUM Hedley, 1901.

(Plate xii., fig. 2.)

1901. *Thersites gulosa* var. *depressa* Hedley, Rec. Austr. Mus., Vol. iv., p. 22 March 29. Jenolan Caves, New South Wales (J. E. Wiburd). Mid New South Wales (Jenolan Caves district).

MERIDOLUM GULOSUM Gould, 1846.

1846. *Helix gulosa* Gould, Proc. Boston Soc. Nat. Hist., Vol. ii., p. 165, August. New South Wales = Illawarra (Drayton). Figd. Gould, U.S. Expl. Exped., Shells, p. 65, pl. iii., fig. 43, 1862?
1847. *Helix coriaria* Pfeiffer, Zeitsch. für Malak., Vol. iv., p. 105, October. "Ceylon" = New South Wales, as above. Figd. Reeve, Conch. Icon., Vol. vii., pl. lxxix., sp. 417, March, 1852. Copied, Pfeiffer, Syst. Conch. Cab., Bd. I., Abth. 12, pt. 2, p. 265, pl. 120, fig. 2, 1853.
1859. *Helix monacha* Pfeiffer, Proc. Zool. Soc. (Lond.), 1859, p. 25, pl. xliii., fig. 7 (January-February), Australia.
1864. *Helix scotti* Cox, Cat. Austr. Land Shells, p. 36. Mt. Keera, Wollongong, New South Wales (Mrs. Edward Forde). Figd. Cox Mon. Austr. Land Shells, p. 39, pl. x., figs. 4, 4a, May, 1868.
1864. *Helix caillieti* Crosse, Journ. de Conch., Vol. xii., p. 285, July 1; id., Journ. de Conch., Vol. xiv., p. 59, pl. i., fig. 5, January 1866. "Oceania" = New South Wales, as above. New South Wales (Illawarra Ranges).

MERIDOLUM MASTERSI COX, 1864.

1864. *Helix mastersi* Cox, Cat. Austr. Land Shells, p. 19. Merimbula, New

South Wales. (Cox, Mon. Austr. Land Shells, p. 36, May, 1868, as synonym of *coriaria*).
New South Wales (Merimbula southwards).

MERIDOLUM DURALENSIS COX, 1868.

1868. *Helix duralensis* Cox, Mon. Austr. Land Shells p. 46, pl. viii., figs. 8, 8a, May. Dural, Wiseman's Ferry, Hawkesbury River, New South Wales.

In the same place nine pages earlier Cox introduced *laesa* Reeve for a shell from this locality, obviously the same species, but just as obviously not *Helix laesa* Reeve (Conch. Icon., Vol. vii., pl. 210, sp. 1490, December, 1854, which was described from unknown locality, and the figure does not appear to represent an Australian shell).

New South Wales (Wiseman's Ferry as above).

Genus GALADISTES nov.

Type, *Helix liverpoolensis* Brazier.

Small thin subglobose shells, spire small, mouth large, apex strongly granulose, sutures deep, outer lip of mouth thin, umbilicus almost closed by appression of reflection of columella; rudely radially sculptured, with a fine subordinate graining throughout, base smoother.

GALADISTES LIVERPOOLENSIS Brazier, 1872.

(Plate xii., fig. 4.)

1872. *Helix (Galaxias) liverpoolensis* Brazier, Proc. Zool. Soc. (Lond.), 1872, p. 618, November 3. Liverpool Range, N.S.W.
New South Wales (Liverpool Range district).

GALADISTES MARCESCENS COX, 1868.

1868. *Helix marcescens* Cox, Proc. Zool. Soc. (Lond.), 1867, p. 724, April 3, 1868. Mon. Austr. Land Shells, p. 37, pl. iv., fig. 5; pl. xviii., fig. 6, May, 1868. Clarence River, N.S.W. (J. MacGillivray).
New South Wales (Clarence River district).

GALADISTES ? PLICULOSA Pfeiffer, 1857.

1857. *Helix pliculosa* Pfeiffer, Proc. Zool. Soc. (Lond.), 1856, p. 368, May 8, 1857. Drayton Range, North Australia (Stutchbury).
South Queensland (Drayton Range).

GALADISTES BOURKENSENSIS Smith, 1891.

(Plate xii., fig. 5.)

1891. *Helix (Hadra) bourkensis* Smith, Ann. Mag. Nat. Hist., Ser. vi., Vol. vii., p. 137, January 1. Bourke, Darling River, N.S.W.
New South Wales (Bourke district).

GALADISTES INTERVENENS sp. nov.

(Plate xii., fig. 8.)

A series of specimens collected by Mr. Sidney W. Jackson, about 40-50 miles north-west of Collarenebri, North New South Wales (inland), are thinner and smaller than *bourkensis* with the granulations a little coarser and the rude radials less marked. The umbilicus is practically closed by the reflected columella, and the outer lip is thin. The coloration is paler green, and the brown banding is weaker. Height, 13 mm.; breadth, 15 mm.

Northern New South Wales (Collarenebri).

Genus EXILIBADISTES Iredale, 1933.

1933. *Exilibadistes* Iredale, Rec. Austr. Mus., Vol. xix., p. 52, August 2. Orthotype, *Helix bednalli* Brazier = *sutilosa* Férussac.

EXILIBADISTES SUTILOSA FÉRUSSAC, 1829.

1829. *Helix sutilosa* Férussac, Hist. Nat. Moll. Terr., livr. 29, pl. 17a, figs. 18-19, ex Tabl. Syst. Moll., p. 47, January; p. 43, June, 1821, *nom. nud.*; Vol. i., p. 203 (Deshayes), 1850. Ile St. Pierre & St. Francois, South Australia (Péron).
1872. *Helix bednalli* Brazier, Proc. Zool. Soc. (Lond.), 1871, p. 641, May 2, 1872. Near Adelaide, South Australia.
South Australia.

Genus CHLORITOBADISTES Iredale, 1933.

1933. *Chloritobadistes* Iredale, Rec. Austr. Mus., Vol. xix., p. 49, August 2. Orthotype, *Helix victoriae* Cox.

CHLORITOBADISTES VICTORIAE COX, 1868.

1868. *Helix victoriae* Cox, Mon. Austr. Land Shells, p. 37, pl. xii., fig. 5, May. Western Port, Victoria (Masters).
1888. *Helix brunonia* Johnston, Papers Proc. Roy. Soc. Tasm., 1887, p. 75. King Island, Bass Strait. Figd. Petterd & Hedley, Rec. Austr. Mus., Vol. vii., p. 285, pl. 85, figs. 2-4 (type), August 30, 1909.
Victoria. King Is., Bass Strait.

This curious development of the *Meridolum* form, where a definite bristly covering is present without material differentiation of shell form, is certainly no relative of true *Chloritis* nor even to the family Chloritidae.

Genus VENTOPELITA Iredale, 1933.

1933. *Ventopelita* Iredale, Rec. Austr. Mus., Vol. xix., p. 55, August 2. Orthotype, *Helix leucocheilus* Cox = *mariae* Cox.

VENTOPELITA MARIAE COX, 1864.

1864. *Helix mariae* Cox, Cat. Austr. Land Shells, Add. p. No. 134. Clarence River, New South Wales (Macgillivray).
1868. *Helix leucocheilus* Cox, Mon. Austr. Land Shells, p. 54, pl. viii., figs. 7 a-b., May. New name for *H. mariae* only.
Northern New South Wales (Clarence River district).

VENTOPELITA BELLENGERENSIS COX, 1871.

(Plate xii., fig. 7.)

1871. *Helix bellengerensis* Cox, Proc. Zool. Soc. (Lond.), 1871, p. 54. Bellenger River, New South Wales.
1871. *Helix bellingenensis* Brazier, Proc. Zool. Soc. (Lond.), 1871, p. 321, August 16. Manarm Creek, Bellenger River, N.S.W.
Northern New South Wales (Bellenger River district).

Note.—At the present time the river is called *Bellenger*, but the town *Bellingen*.

VENTOPELITA LISMORENSIS PILSBRY, 1890.

1890. *Helix leucocheilus* var. *lismorensis* Pilsbry, Man. Conch. (Tryon), Ser. 2, Vol. vi., p. 140, pl. 40, fig. 13, December 16. Lismore, Richmond River.
Northern New South Wales (Richmond River district).

VENTOPELITA MANSUETA Reeve, 1854.

1854. *Helix mansueta* Reeve, Conch. Icon., Vol. vii., *Helix*, pl. 187, sp. 1304, July, ex Pfeiffer (Proc. Zool. Soc. (Lond.), 1854, p. 57, January 10, 1855). Moreton Bay, Queensland (Strange). South Queensland (Moreton Bay district).

VENTOPELITA YATALAENSIS Cox, 1873.

1873. *Helix yatalaensis* Cox, Proc. Zool. Soc. (Lond.), 1873, p. 149, pl. xvi., figs. 3a-b., June. Yatala Albert River, South Queensland. South Queensland.

VENTOPELITA PUSILLA Hedley, 1912.

1912. *Planispira leucocheila* var. *pusilla* Hedley, Proc. Linn. Soc. N.S.W., Vol. xxxvii., p. 259, pl. vii., figs. 32-35, December 13. Tinaroo, S.W. of Cairns, North Queensland. North Queensland.

VENTOPELITA CUMULUS Reeve, 1854.

1854. *Helix cumulus* Reeve, Conch. Icon., Vol. vii., pl. 195, sp. 1368, September. ex Pfeiffer (Proc. Zool. Soc. (Lond.), 1854, p. 145, April 11, 1855). Banks of Manning River, East Australia. Mid New South Wales.

Genus MERACOMELON Iredale, 1933.

1933. *Meracomelon* Iredale, Rec. Austr. Mus., Vol. xix., p. 52, August 2. Orthotype, *Helix rufofasciata* Brazier.

MERACOMELON RUFOFASCIATUM Brazier, 1875.

1875. *Helix (Hadra) rufofasciata* Brazier, Proc. Linn. Soc. N.S.W., Vol. i., p. 17, April 27. Yardea, 360 miles north of Adelaide, South Australia = Gawler Ranges. South Australia (Gawler Ranges).

MERACOMELON SUBLORIOLIANUM Pilsbry, 1890.

1890. *Helix sublorioliana* Pilsbry, Man. Conch. (Tryon), Ser. 2, Vol. vi., p. 147, pl. 58, figs. 10-12, December 16. Flinders Range, South Australia. South Australia (Flinders Range, east side).

MERACOMELON EXTENSUM Iredale, 1937.

1937. *Meracomelon subloriolianum extensum* Iredale, South Austr. Nat., Vol. xviii., p. 32, pl. i., fig. 7, September 30. Maldigo Hills, South Australia. South Australia (Maldigo Hills). New South Wales (Silverton).

MERACOMELON LORIOLIANUM Crosse, 1863.

1863. *Helix lorioliana* Crosse, Journ. de Conch., Vol. xi. p. 273, pl. ix., fig. 6, July 1. Mountains behind Spencer Gulf, South Australia. South Australia (Flinders' Range, west side).

MERACOMELON BROUGHAMI Angas, 1875.

1875. *Helix broughami* Angas, Proc. Zool. Soc. (Lond.), 1875, p. 389, pl. xlv., figs. 4-4a, October 1. Port Lincoln, South Australia. South Australia (Port Lincoln district).

MERACOMELON CASSANDRA Pfeiffer, 1864.

1864. *Helix cassandra* Pfeiffer, Proc. Zool. Soc. (Lond.), 1863, p. 527, April

20 1864. Murray Cliffs, South Australia. Figd. Cox, Mon. Austr. Land Shells, p. 50, pl. xix., fig. 8, May, 1868, from a painting of the type by Angas.
South Australia (Murray Cliffs).

MERACOMELON MOORUNDIANUM Iredale, 1937.

1937. *Meracomelon moorundianum* Iredale, South Austr. Nat., Vol. xviii., p. 32, pl. i., fig. 28, September 30. Tailem Bend, S.A.
South Australia (Tailem Bend district).

MERACOMELON STUTCHBURYI Pfeiffer, 1857.

1857. *Helix stutchburyi* Pfeiffer, Proc. Zool. Soc. (Lond.), 1856 p. 386, May 8, 1857. "Drayton Range, North Australia (Stutchbury)," error = Port Elliott, South Australia. Cf. Angas, Proc. Zool. Soc. (Lond.), 1863, p. 520, April 20, 1864 (Figd. Cox, Mon., p. 39, pl. x., fig. 10, is not this species).
South Australia (Fleurieu Peninsula).

MERACOMELON MERIDIONALE Gude, 1903.

1903. *Thersites (Badistes) meridionalis* Gude Proc. Malac. Soc. (Lond.), Vol. v., p. 262, pl. vii., figs. 5-7, April. South Australia = Blinman eastwards.
South Australia.

MERACOMELON SUSPECTUM Iredale, 1937.

1937. *Meracomelon meridionale suspectum* Iredale, South Austr. Nat., Vol. xiii., p. 33, pl. i., fig. 27, September 30. Parachilna, South Australia.
South Australia (Flinders Range west).

MERACOMELON MARCIDUM Hedley, 1912.

1912. *Xanthomelon marcidum* Hedley, Rec. Austr. Mus., Vol. viii., p. 157, pl. xlv., figs. 47-50, May 6. Ualba Range 12 miles west of Lake Cudgellico, South Central New South Wales.
New South Wales (South Central).

Genus FINDOMELON Iredale, 1937.

1937. *Findomelon* Iredale, South Austr. Nat., Vol. xviii., p. 33, September 30. Haplotype, *Helix luteofusca* Cox.

FINDOMELON LUTEOFUSCUM Cox, 1868.

1868. *Helix luteofusca*, Cox, Mon. Austr. Land Shells, p. 52, pl. xii., figs. 1-1a, May. Flinders Range, South Australia (Masters).
South Australia (Flinders Range).

Genus CONTRAMELON Iredale, 1937.

1937. *Contramelon* Iredale, South Austr. Nat., Vol. xviii., p. 34, September 30. Haplotype, *Helix howardi* Angas.

CONTRAMELON HOWARDI Angas, 1869.

1869. *Helix* (? *Plectotropis*) *howardi* Angas, Proc. Zool. Soc. (Lond.), 1869, p. 48, pl. ii., fig. 9, June 21. Arrowie, 450 miles north of Adelaide, South Australia.
South Australia (Arrowie district).

Genus CUPEDORA Iredale, 1933.

1933. *Cupedora* Iredale, Rec. Austr. Mus., Vol. xix., p. 48, August 2. Orthotype, *Helix lincolniensis* Pfeiffer.

CUPEDORA PATRUELI Angas, 1864.

1864. *Helix (Hadra) patruelis* Angas, Proc. Zool. Soc. (Lond.), 1863, p. 520, Apr. 20, 1864, ex. A. Adams & Angas M.S. Port Lincoln, South Australia. Fig. Cox. Mon. Austr. Land Shells, p. 49, pl. iii., fig. 8, May, 1868.
1864. *Helix lincolniensis* Pfeiffer, Proc. Zool. Soc. (Lond.), 1863, p. 528, April 20, 1864. Evandale, South Australia. Figd. Cox. Mon. Austr. Land Shells, p. 51, pl. vi., fig. 9, May, 1868. South Australia. (Port Lincoln district).

CUPEDORA EVANDALEANA, Pfeiffer, 1864.

1864. *Helix evandaleana* Pfeiffer, Proc. Zool. Soc. (Lond.), 1863, p. 528, Apl. 20, 1864. Evandale, South Australia. Fig. Cox, Mon. Austr. Land Shells, p. 51, pl. ix., fig. 18 March, 1868.
- [1878. *Helix induta* Tate, Proc. Linn. Soc., N.S.W., Vol. ii., p. 290, June. Kaisertuhl, South Australia. Not *Helix induta* Pfeiffer, Proc. Soc. (Lond.), 1845, pl. 28, February, 1846.] South Australia (Evandale district).

CUPEDORA TOMSETTI Tate, 1887.

1887. *Helix tomsetti* Tate, Trans. Roy. Soc. South Austr., Vol. ix., 1886, p. 63, pl. v., figs. 13a-c, March, 1887. Cape Borda. Kangaroo Island, South Australia. South Australia (Kangaroo Island).

Genus DISCOMELON *nov.*Type, *D. intricatum sp. nov.*

Shell thin, glossy, flattened, spire scarcely raised, narrowly but perspectivevely umbilicated, mouth open, outer lip thin. This may be related to *Meracomelon* or to *Meridolum*, but at present its relationships are very obscure.

DISCOMELON INTRICATUM *sp. nov.*

(Plate xii. fig. ii.)

The coloration is pale honey, sometimes showing a pale reddish sub-sutural band, and a broader antep peripheral band, the under side paler and unbanded. The apex is apparently smooth, an obscure granulation rarely seen, the adult sculpture only showing smoothened growth lines, no granulation visible. The whorls are five and a half, and the largest specimen (type) measures 20 mm. in breadth, and 10 mm. in height. Collarenebri, N.S.W. (Jackson).

Northern New South Wales.

Genus SEMOTRACHIA Iredale, 1933.

1933. *Semotrachia* Iredale, Rec. Aust. Mus., Vol. xix., p. 51, August 2. Orthotype, *Thersites basedowi* Hedley.
1933. *Catellotrachia* Iredale, Rec. Aust. Mus., Vol. xix., p. 52, August 2. Orthotype, *Hadra winneckeana* Tate.
1933. *Spernachloritis* Iredale, Rec. Austr. Mus., Vol. xix., p. 52, August 2. Orthotype, *Hadra setigera* Tate.

SEMOTRACHIA BASEDOWI Hedley, 1905.

1905. *Thersites basedowi* Hedley, Trans. Roy. Soc. South Austr., Vol. xxix., p. 161, pl. xxx., figs. 1-3, December. Musgrave Ranges, Central Australia. Central Australia (Musgrave Ranges).

SEMOTRACHIA MANNENSIS Iredale, 1937.

1937. *Semotrachia basedowi mannensis* Iredale, South Austr. Nat., Vol. xviii., p. 37, pl. ii., fig. 18, September 30. Mann Range, Central Australia. Central Australia (Mann Range).

SEMOTRACHIA WINNECKEANA Tate, 1894.

1894. *Hadra winneckeana* Tate, Trans. Roy. Soc. South Austr. Vol. xviii., p. 194, November. Central Australia. Figd. Rep. Horn Sci. Exped. Cent. Austr., pt. ii., Zool. p. 191, pl. xviii., fig. 8, February, 1896 (Spencer Gorge). Central Australia (Spencer Gorge).

SEMOTRACHIA EUZYGA Tate, 1894.

1894. *Hadra euzyga* Tate, Trans. Roy. Soc. South Austr. Vol. xviii., p. 194, November. Central Australia. Figd. Horn Sci. Exped. Cent. Austr., pl. ii., Zool., p. 190, pl. xvii., fig. 7. February, 1896 (Alice Springs). Central Australia (Alice Springs).

SEMOTRACHIA SETIGERA Tate, 1894.

1894. *Hadra setigera* Tate, Trans. Roy. Soc. South Australia, Vol. xviii., p. 194, November. Central Australia. Figd. Rep. Horn Sci. Exped. Cent. Austr., pt. ii., Zool., p. 189, pl. xviii., fig. 6, February, 1896. (MacDonnell Ranges).
1896. (*Angasella*) *larapinta* Tate, Rep. Horn Sci. Exped. Cent. Austr. pl. ii., Zool., p. 190, February. New name only. Central Australia (MacDonnell Ranges).

SEMOTRACHIA ESAU Iredale, 1937.

1937. *Semotrachia esau* Iredale, South Austr. Nat., Vol. xviii., p. 38, pl. i., fig. 11. Krickaueff Ranges, South Australia. Central Australia (Krickaueff Ranges).

SEMOTRACHIA PAPILLOSA Tate, 1894.

1894. *Hadra papillosa* Tate, Trans. Roy. Soc. South Austr., Vol. xviii., p. 194, November. Central Australia. Figd. Rep. Horn Sci. Exped. Centr. Austr., pt. ii., Zool., p. 191, pl. xviii., fig. 9, February, 1896. No locality ex Rev. H. Kempe. Central Australia (probably MacDonnell Ranges).

SEMOTRACHIA SUBSECTA Tate 1879

1879. *Helix subsecta* Tate, Trans. Proc. Phil. Soc. Adelaide, South Austr., 1878-9, p. 133, pl. v., fig. 2a-b., after October. Port Wakefield, South Australia (Mrs. Kreuzler). South Australia (exact locality not certain).

Genus DIRUTRACHIA Iredale, 1937.

1937. *Dirutrachia* Iredale, South Austr. Nat., Vol. xviii., p. 36, September 30. Orthotype, *Hadra sublevata* Tate.

DIRUTRACHIA SUBLEVATA Tate.

1894. *Hadra sublevata* Tate, Trans. Roy. Soc. South Austr., Vol., xviii, p. 192, November. Central Australia. Fig. Rep. Horn Sci. Exped. Cent. Austr., pt. ii., p. 196, pl. xvii., fig. 5, February, 1896 (Hart Ranges). Central Australia (Hart Ranges).

DIRUTRACHIA MERSA Iredale, 1937.

1937. *Semotrachia mersa* Iredale, South Austr. Nat., Vol. xviii., p. 38, pl. ii., fig. 9, September 30. Musgrave Ranges, C.A. Central Australia (Musgrave Ranges).

Genus LACUSTRELIx Iredale, 1937.

1937. *Lacustrelia* Iredale, South Austr., Nat., Vol. xviii., p. 39, September 30. Haplotype, *Helix eyrei* H. Adams & Angas.

LACUSTRELIx EYREI H. Adams & Angas, 1876.

1876. *Helix eyrei* H. Adams & Angas, Proc. Zool. Soc. (Lond.), 1876, p. 489, pl. xlvii., figs. 10-12, October 1. Shores of Lake Eyre, Central Australia.
 1877. *Helix eyrensis* Martens, Zool. Record, 1876, Moll., p. 44, emend. only. South Australia (Lake Eyre district).

Genus VIDUMELON Iredale, 1933.

1933. *Vidumelon* Iredale, Rec. Austr. Mus., Vol. xix., p. 51, August 2. Orthotype, *Hadra wattii* Tate.

VIDUMELON WATTII Tate, 1894.

1894. *Hadra wattii* Tate, Trans. Roy. Soc. South Austr., Vol. xviii., p. 192, November. Central Australia. Figd. Rep. Horn. Sci. Exped. Cent. Austr., pt. ii., Zool., p. 201, pl. xviii., fig. 12, February, 1896 (Maude River, Hart Ranges).
 Central Australia (Hart Ranges).

Family PAPUINIDAE.

The species classed under *Papuina* are here given family rank, so that definiteness may be achieved in distinguishing Helicoid molluscs. They are mostly tree-living, of delicate texture, with elevated trochoid form, and light or bright coloration. The Australian forms are of diverse facies and obviously of different origin, and all belong to the Papuan or Torresian faunula. None is referable to the typical genus, *Papuina* Martens (Die Heliceen (Albers), 2nd ed., pl. xiv, 166, 1861), based on *Helix lituus* Lesson, and of which *Eugenia* Albers (loc. cit.) and *Insularia* Tapparone-Canefri (Ann. Mus. Civ. Genov., Vol. xix., pl. 115, 138, 1883) are absolute synonyms.

Genus RHYNCHOTROCHUS Möllendorff, 1895.

1895. *Rhynchotrochus* Möllendorff, Proc. Mal. Soc. (Lond.), Vol. i., p. 237, March. Logotype, Zool. Rec., 1895, Moll., p. 56, 1896. *tayloriana*.
 1933. *Papuxul* Iredale, Rec. Austr. Mus., Vol. xix., p. 41, August 2. Orthotype, *Helix bidwilli* Pfeiffer.
 1933. *Noctepuna* Iredale, Rec. Austr. Mus., Vol. xix., p. 41, August 2. Orthotype, *Helix poiretiana* Reeve.

RHYNCHOTROCHUS MACGILLIVRAYI Forbes, 1851.

1851. *Helix macgillivrayi* Forbes, Narr. Voy. Rattlesnake, (Macgillivray), Vol. ii., p. 378, pl. iii., fig. 1, 1852 = mid-December, 1851. Frankland Island, North Queensland.
 North Queensland.

Note.—The mainland form, especially north of Cairns, is much broader with a more elongate mouth, the upper part of the outer lip more twisted

and incurved, and may be called *R. macgillivrayi extensior subsp. nov.*, the type measuring 25 mm. in breadth by 20 mm. in height. (Plate xii., fig. 3).

RHYNCHOTROCHUS POIRETIANUS Reeve, 1852.

1852. *Helix poiretiana* Reeve, Conch. Icon., Vol. vii., pl. lxxix, sp. 418, March 11, ex Pfeiffer (Proc. Zool. Soc. (Lond.), 1851, p. 254, July 26, 1853), Port Essington, error = Night I., Queensland.
North Queensland (Night Island).

RHYNCHOTROCHUS BIDWILLI Reeve, 1853.

1853. *Helix bridwilli* (sic.) Reeve, Conch. Icon., Vol. vii., pl. 157, sp. 1034, May. Wide Bay, Queensland (F. C. Bridwill).
1854. *Helix bridwilli* Pfeiffer, Proc. Zool. Soc. (Lond.), 1853, p. 49, July 25, 1854, name corrected to *bidwilli*. Figd. Cox, Mon. Austr. Land Shells, p. 63, pl. ii. fig. 3, May, 1868.
South Queensland. Northern New South Wales.

Genus POSORITES Iredale, 1933.

1933. *Posorites* Iredale, Rec. Austr. Mus., Vol. xix., p. 42, August 2. Orthotype, *Helix fricata* Pfeiffer.

POSORITES FUCATA Pfeiffer, 1853.

1853. *Helix fucata* Pfeiffer, Zeitsch. für. Malak., Vol. x., p. 56, March: Proc. Zool. Soc. (Lond.), 1853, p. 58, July 25, 1854. Wide Bay, Queensland. Figd. Reeve, Conch. Icon., Vol. vii., pl. 157, sp. 1029, May, 1853. Cox, Mon. Austr. Land Shells p. 67, pl. ii., fig. 8, May, 1868.
South Queensland.

POSORITES CONSCENDENS Cox, 1866.

1866. *Helix conscendens* Cox, Proc. Zool. Soc. (Lond.), 1866, p. 374, September 5. Richmond River, New South Wales (Macgillivray). Figd. Cox, Mon. Austr. Land Shells, p. 67, pl. ii., fig. 6, May, 1868.
Northern New South Wales.

POSORITES MAYANA Hedley, 1899.

1899. *Papuina mayana* Hedley, Rec. Austr. Mus., Vol. iii., p. 151, pl. xxviii., figs. 10-11, December 11. Upper Annan River, Cooktown, Q. (Miss E. Hatfield).
North Queensland.

POSORITES CEREAE Hedley, 1894.

1894. *Papuina cerea* Hedley, Nautilus, Vol. vii., p. 136, text fig., April. Vict. Naturalist, Vol. xi., p. 30, April. Blomfield River, North Queensland (W. D. Le Souef).
North Queensland.

POSORITES MUENSIS Hedley, 1912.

1912. *Papuina muensis* Hedley, Rec. Austr. Mus., Vol. viii., p. 154, pl. xlix., figs. 44-45, May 6. Mua I., Torres Strait.
North Queensland (Torres Strait's Islands).

POSORITES TURNERI Shirley, 1921.

1921. *Papuina turneri* Shirley, Queensland Naturalist, Vol. iii., p. 36, fig. in text, October. National Park, South Queensland.
South Queensland.

Genus RACHISPECULUM Iredale, 1933.

1933. *Rachispeculum* Iredale, Rec. Austr. Mus., Vol. xix., p. 42, August 2. Orthotype, *Bulimus bidwilli*, Cox.

RACHISPECULUM BIDWILLI Cox, 1868

1868. *Bulimus bidwilli* Cox, Mon. Austr. Land Shells, p. 72, pl. xiii., fig. 11, May. Burnett River, South Queensland (Bidwill).
 1893. *Papuina folicola* Hedley, Nautilus, Vol. vii., pp. 73-74, November. New name for preceding. South Queensland.

Genus AMIMOPINA Iredale, 1933.

1933. *Amimopina* Iredale, Rec. Austr. Mus. Vol. xix., p. 42, August 2. Orthotype, *Bulimus beddomei* Brazier.

AMIMOPINA BEDDOMEI Brazier, 1880.

1880. *Bulimus beddomei* Brazier, Proc. Linn. Soc. N.S.W., Vol. iv., p. 394, May: Torres Strait (ex id. Proc. Linn. Soc. N.S.W., Vol. i., p. 127, July, 1876, *nomen nudum*). Fig. Pilsbry Man. Conch. (Tryon), Ser. 2, Vol. xiii., p. 121, pl. 4, fig. 68, 1900.
 [*Bulimus macleayi* Brazier, Proc. Linn. Soc. N.S.W., Vol. i., p. 108, July, 1876. Yule Island, New Guinea is a distinct species.] North Queensland.

Family CHLORITIDAE.

Under the generic name *Chloritis* a large assemblage of land shells has been created. The essential features of the original *Chloritis* were a hairy shell associated with a pustulate protoconch, flattened spire and wide umbilicus. At present the series includes non-hairy shells with smooth protoconch, elevated spires and imperforate. There is however, a general superficial resemblance, striking features being the thinness of the shells and uniform brownish coloration. Gude making a study of this group named a number of species, and fortunately most of the types and paratypes are available. An attempt is here made to sort out the forms, and group them into series so that it may become easier to allot new species accurately.

Genus AUSTRORCHLORITIS Pilsbry, 1891.

1891. *Austrochloritis* Pilsbry, Man. Conch. (Tryon), 2nd. Ser., Vol. vi., pp. 242, 262, May 1. Orthotype, *Helix porteri*, Cox.

AUSTRORCHLORITIS PORTERI Cox, 1866.

1866. *Helix porteri* Cox, Proc. Zool. Soc. (Lond.), 1866, p. 373, September 5. Guy Faux Station, Upper Clarence River, N.S.W. (Porter). Figd. Cox, Mon. Austr. Land Shells, p. 48, pl. iii., fig. 6, May, 1868. Northern New South Wales.

AUSTRORCHLORITIS ASTAEUS Gude 1906.

1906. *Chloritis astaeus* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 108, pl. xiii., figs. 6a-c., June 29, ex Brazier MS. Cardwell, North Queensland. North Queensland.

AUSTRORCHLORITIS AGAMEMNON Gude, 1906.

1906. *Chloritis agamemnon* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 108, pl. xiii., figs. 7a-c., June 29, ex Brazier MS. Near Cardwell, North Queensland. North Queensland.

AUSTROCHLORITIS FRINGILLA *sp. nov.*

(Plate xii., fig. 6.)

Similar to *A. porteri*, but smaller with the spire a little more elevated, the umbilicus more hidden, and the hairs shorter and more numerous. Breadth, 15 mm.; height, 11 mm. Type from Finch Hatton, near Mackay, Queensland (S.W. Jackson).

Mid Queensland (Mackay district).

AUSTROCHLORITIS BREVIPILA Pfeiffer, 1850.

1850. *Helix brevipila* Pfeiffer, Proc. Zool. Soc. (Lond.), 1849, p. 130, January-June, 1850. East Coast of New Holland (Strange) = Bellenger River, New South Wales. selected by Gude. Figd. Pfeiffer, Syst. Conch. Cab. (Mart. & Chemn.), ed. Kuster, pl. 124, figs. 28-30, ante 1852. Reeve, Conch. Icon., Vol. vii., pl. 128, sp. 777, October, 1852. Type figured by Gude, Proc. Mal. Soc. (Lond.), Vol. vii., p. 48, pl. iv., fig. 9, March 9, 1906.

Northern New South Wales.

AUSTROCHLORITIS METUENDA *sp. nov.*

(Plate xii., fig. 9.)

Allied to *brevipila*, as selected by Gude, but larger with the umbilicus more covered, but the mouth more open. Breadth, 13 mm.; height, 8 mm. Illawarra, New South Wales.

Southern New South Wales. ? Victoria.

AUSTROCHLORITIS LAYARDI Gude, 1906.

1906. *Chloritis layardi* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 49, pl. v., figs. 4a-c., March 9. Islands in Torres Str. North Queensland (Torres Straits Islands).

AUSTROCHLORITIS BILABIATA Odhner, 1917.

1917. *Chloritis bilabiata* Odhner, Kungl. Svensk. Vetensk. Handl., Bd. 52, No. 16, p. 85, pl. 3, figs. 94-96, text-figs. 42-43, September 19. Malanda, North Queensland. North Queensland.

AUSTROCHLORITIS BIGHIANA *sp. nov.*

(Plate xii., fig. 10.)

Similar to *layardi* Gude, but with the apex a little elevated, not sunken, a little larger, the umbilicus smaller, the mouth descending with callus connecting lips. Breadth, 10 mm.; height, 7 mm. Type from Restoration Island, Queensland.

North Queensland (Restoration Island).

Note.—There are apparently, at least two series included in *Austrochloritis*, and the subgeneric name *Nannochloritis* is introduced, with *layardi* Gude as type, for the smaller species.

AUSTROCHLORITIS SENTICULA *sp. nov.*

(Plate xii., fig. 12.)

Related to *layardi* Gude, with the spire a little elevated, the sutures deeper, the hairs more distant, and the umbilicus more concealed. The height is 6 mm., the breadth 10 mm. Miriam Vale, near Port Curtis, Queensland.

South Queensland (Port Curtis district).

AUSTROCHLORITIS DISJUNCTA Gude, 1906.

1906. *Chloritis disjuncta* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 49, pl. v. figs. 3, 3a, March 9. Port Stephen (s), New South Wales. Mid New South Wales.

AUSTROCHLORITIS NOVOCAMERICA Gude, 1906.

1906. *Chloritis novocambrica* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 49, pl. v., figs. 2a-c., March 9. New South Wales = Bellenger River. Northern New South Wales.

AUSTROCHLORITIS SEPARANDA *sp. nov.*

(Plate xii., fig. 13.)

Larger than the preceding, spire more elevated, umbilicus wider, hairs more distant. Breadth, 15 mm.; height, 11.5 mm. Type from North Pine River, South Queensland.

South Queensland.

AUSTROCHLORITIS BUXTONI Brazier, 1880.

(Plate xii., fig. 14.)

1880. *Helix (Planispira) buxtoni* Brazier, Proc. Linn. Soc. N.S.W., Vol. iv., p. 394, May. Thursday Island, Torres Strait. North Queensland (Islands in Torres Strait).

Note.—Shells marked as typical by Brazier himself show hair scars, the hairs apparently being long and rather distant; the shells have flattened spire with granulated apex, a wide umbilicus, but the outer lip of the mouth shows expansion, in a specimen from Sue Island, almost flaring and recalling *Torresitrachia*, as if they might be hairy derivatives. In order to keep this point in view, the subgeneric name *Patrubella* is proposed with *buxtoni* as type.

Genus TOLGACHLORITIS Iredale, 1933.

1933. *Tolgachloritis* Iredale, Rec. Austr. Mus., Vol. xix., p. 50, August 2. Orthotype, *Chloritis jacksoni* Hedley.

TOLGACHLORITIS JACKSONI Hedley, 1912.

1912. *Chloritis jacksoni* Hedley Proc. Linn. Soc. N.S.W., Vol. xxxvii., p. 256, pl. v., figs. 13-16, December 13. Near Cairns, North Queensland. North Queensland.

Genus MUSSONENA *nov.*

Type, *Helix spinei* Cox.

The species is flattened, narrowly umbilicate, mouth open, outer lip thin, columella scarcely reflected. The apex is obscurely granulose, and the adult shell is clothed with widely spaced long stiff hairs.

MUSSONENA SPINEI COX, 1868.

1868. *Helix spinei* Cox, Mon. Austr. Land Shells, add. page, 111, post. May. New name for
1868. *Helix hystrix* Cox, Mon. Austr. Land Shells, p. 48, pl. xviii. figs. 5a-b., May. Port Curtis, Queensland. Not *H. hystrix* Pfeiffer, Symb. Helic., pt. iii., p. 67, 1846.
1907. *Chloritis munda* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 229, pl. xxi., figs. 2a-d., April 3. Moon Creek, Burnett River, Queensland. South Queensland.

MUSSONENA CAMPBELLI *sp. nov.*

(Plate xii., fig. 15.)

Similar to *spinei* Cox, but spire a little elevated, hairs longer, widely spaced, umbilicus deep, narrow, lip thin. Height, 7mm.; breadth, 10 mm. Type from Chillagoe Caves, N.Q. (W. D. Campbell).

North Queensland (Chillagoe Caves district).

Genus NEVERITIS *nov.*

Type, *Chloritis poorei* Gude.

These small shells appear to be hairless, but show granulation, which has suggested hair bearing scars; the texture is unlike that of the preceding, and the form also differs.

NEVERITIS POOREI Gude, 1907.

1907. *Chloritis poorei* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 231, pl. xxi., figs. 7a-d., April 3. Cardwell, North Queensland.
North Queensland (Cardwell district).

NEVERITIS MISELLA Gude, 1907.

1907. *Chloritis misella* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 232, pl. xxi., figs. 9a-d., April 3. Queensland.
Queensland.

NEVERITIS THALES Gude, 1907.

1907. *Chloritis thales* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 232, pl. xxi., figs. 8a-d., April 3. Rockingham Bay, Queensland.
North Queensland (Rockingham Bay district).

NEVERITIS ARIDORUM COX, 1866.

1866. *Helix aridorum* Cox, Journ. de Conch., Vol. xiv., p. 47, January 1. Proc. Zool. Soc. (Lond.), 1865, p. 695, April 24, 1866. Clarence River, New South Wales (Macgillivray).
1868. *Helix aridorum* Cox, Proc. Zool. Soc. (Lond.), 1867, p. 724, April 3, 1868. Clarence River, New South Wales (Macgillivray). Figd. Cox, Mon. Austr. Land Shells, p. 44, pl. xi., figs. 16, 16a., May, 1868. Re-figd. Hedley, Proc. Linn. Soc. N.S.W., Vol. xxxvii., p. 257, pl. vi., figs. 20-23, December 13, 1912 (North Brisbane specimen).
Northern New South Wales. South Queensland.

Genus OFFACHLORITIS Iredale, 1933.

1933. *Offachloritis* Iredale, Rec. Austr. Mus., Vol. xix., p. 50, August 2. Orthotype, *Helix dryanderensis* Cox.

OFFACHLORITIS DRYANDERENSIS COX, 1872.

(Plate xii., fig. 16.)

1872. *Helix dryanderensis* Cox, Proc. Zool. Soc. (Lond.), 1872, p. 19, June. Mount Dryander, Port Denison, Queensland.
Mid Queensland.

Genus OBSTEUGENIA Iredale, 1933.

1933. *Obsteugenia* Iredale, Rec. Austr. Mus., Vol. xix., p. 50, August 2. Orthotype, *Chloritis inflecta* Hedley.

OBSTEUGENIA INFLECTA Hedley, 1912.

1912. *Chloritis inflecta* Hedley, Proc. Linn. Soc. N.S.W., Vol. xxxvii., p. 256, pl. iv., figs. 9-11, December 13. Tinaroo, North Queensland.
North Queensland.

Genus CHLORITISANAX Iredale, 1933.

1933. *Chloritisanax* Iredale, Rec. Austr. Mus., Vol. xix., p. 49, August 2. Orthotype, *Helix banneri* Pfeiffer.

CHLORITISANAX BANNERI Pfeiffer, 1863.

1863. *Helix banneri* Pfeiffer, Proc. Zool. Soc. (Lond.), 1862, p. 270, April 20, 1863, ex Macgillivray MS. Cape Direction, North Queensland (Macgillivray). Figd. Cox, Mon. Austr. Land Shells, p. 6, pl. xx., fig. 6, May, 1868, from a painting of the type by Angas. North Queensland.

Genus RAMOGENIA nov.

Type, *Chloritis obnubila* Gude, 1907.

Shells recalling *Austrochloritis* in general appearance, but with no trace of hair scars, and obviously no hairs, therefore not a *Chloritis* even in a general sense.

RAMOGENIA OBNUBILA Gude, 1907.

1907. *Chloritis obnubila* Gude, Proc. Mal. Soc. (Lond.), Vol. vii., p. 232, pl. xxi. figs. 10a-b., April 3. Australia = South Queensland. South Queensland.

RAMOGENIA CHALLENGERI Gude, 1906.

1906. *Chloritis challengerii* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 108, pl. xiii., figs. 5a-b., June 29. Queensland (Challenger) = South Queensland. South Queensland.

RAMOGENIA LANUGINOSA Gude, 1907.

1907. *Chloritis lanuginosa* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 230, pl. xxi., figs. 3a-d., April 3. Eidsvold, South Queensland. South Queensland.

RAMOGENIA MUCIDA Pfeiffer, 1857.

1857. *Helix mucida* Pfeiffer, Proc. Zool. Soc. (Lond.), 1856, p. 329, March 10, 1857. Percy's Isle, Queensland. Figd. Cox, Mon. Austr. Land Shells, p. 59, pl. xix., figs. 7, 7a., May, 1868, from a painting of the type by Angas. Mid Queensland (Percy's Isle).

Genus DAMOCHLORA nov.

Type, *Helix millepunctata* Smith.

These Westralian species have flattened shells, widely umbilicated, thin, open mouth, spire a little elevated, sculpture minute punctations or granulation, and do not seem to be related to Eastern groups.

DAMOCHLORA MILLEPUNCTATA Smith, 1894.

1894. *Helix (Chloritis) millepunctata* Smith, Proc. Malac. Soc. (Lond.), Vol. I., p. 88, pl. vii., fig. 11, June. Baudin Is., N.W.A. North West Australia (Baudin Island).

DAMOCHLORA CASSINIENSIS Smith, 1894.

1894. *Helix (Chloritis) millepunctata* var. *cassiniensis* Smith, Proc. Malac. Soc. (Lond.), Vol. I., p. 88, pl. vii., fig. 12, June. Cassini Is. N.W.A. North West Australia (Cassini Is.).

DAMOCHLORA RECTILABRUM Smith, 1894.

1894. *Helix (Chloritis) rectilabrum* Smith, Proc. Malac. Soc. (Lond.), Vol. I., p. 88, pl. vii., fig. 14, June. Parry Harbour, N.W.A. North West Australia (Parry Harbour district).

Genus GLOREUGENIA Iredale, 1933.

1933. *Gloreugenia* Iredale, Rec. Austr., Mus., Vol. xix., p. 50, August 2. Orthotype, *Helix coxeni* Cox.

GLOREUGENIA COXENI Cox, 1871.

1871. *Helix coxeni* Cox, Proc. Zool. Soc. (Lond.), 1871, p. 54, pl. iii., fig. 12, June 12. Whitsunday Island, North Queensland. Mid Queensland (Whitsunday Island).

GLOREUGENIA EXILIS Gude, 1907.

1907. *Chloritis exilis* Gude, Proc. Mal. Soc. (Lond.), Vol. vii., p. 230, pl. xxi., figs. 4a-d., April 3. Mount Dryander, Port Denison, Queensland. Mid Queensland.

GLOREUGENIA COGNATA Gude, 1907.

1907. *Chloritis cognata* Gude, Proc. Mal. Soc. (Lond.), Vol. vii., p. 231, pl. xxi., figs. 5a-d., April 3. Olsen's Caves, Rockhampton, Queensland. South Queensland.

GLOREUGENIA CARDUELIS *sp. nov.*

(Plate xiii., fig. 1.)

Similar to *coxeni* Cox, but much larger, with the umbilicus more covered, and the hairs more distinct. Breadth, 27 mm.; height, 22.5 mm. Type from Finch Hatton, near Mackay, Queensland, collected by G. M. Goldfinch. Mid Queensland.

GLOREUGENIA HEDLEYI Fulton, 1906.

1906. *Chloritis (Austrochloritis) hedleyi* Fulton, Proc. Malac. Soc. (Lond.), Vol. vii., p. 362, figs. in text, September. Herbert River scrubs, N.Q. North Queensland.

GLOREUGENIA PRAECURSORIS Hedley, 1912.

1912. *Chloritis cognata* var. *praecursoris* Hedley, Proc. Linn. Soc. N.S.W., Vol. xxxvii., p. 257, pl. v., figs. 17-19, December 13. West of Finch Hatton, 50 miles West of Mackay, Queensland. Mid Queensland.

GLOREUGENIA BLACKALLI Brazier, 1875.

(Plate xii., fig. 26.)

1875. *Helix (Dorcasia) blackalli* Brazier, Proc. Linn. Soc. N.S.W., Vol. I., p. 1, April 27. Mount Dryander, near Port Denison, Queensland. Mid Queensland.

Genus CALVIGENIA *nov.*

Type, *Helix blackmani* Cox.

This form agrees with *Gloreugenia* in general form, but is not hair-bearing, a velvety pustulose periostracum being seen instead. The apex is not granulated but radially striate.

CALVIGENIA BLACKMANI Cox, 1868.

1868. *Helix blackmani* Cox, Mon. Austr. Land Shells, p. 45, pl. xi., figs. 7-7a, May. Warroo. Port Curtis, Queensland (Blackman). South Queensland.

CALVIGENIA DAINTREEI Brazier, 1875.

1875. *Helix (Xanthomelon) daintreei* Brazier, Proc. Zool. Soc. (Lond.), 1875, pl. iv., fig. 8 June. "Muggerbaa, Moreton Bay". Error = *Chinchilla*, *vide* Hedley.
South Queensland.

CALVIGENIA BENNETTI Brazier, 1872.

- [1872. *Helix (Hadra) bennetti* Brazier, Proc. Zool. Soc. (Lond.), 1871, p. 639, May 2, 1872. Ipswich, Queensland.
South Queensland.]

Note.—The identity of this species is indeterminable at present.]

GENUS PARGLOGENIA *nov.*

Type, *Helix pelodes* Pfeiffer.

Shell similar in form to *Gloreugenia*, but being granulose and lacking hairs with the apex slightly granulose suggests the valuelessness of hair characters. *Kimboraga* has neither hairs nor grains, yet is of similar form.

PARGLOGENIA PELODES Pfeiffer, 1846.

1846. *Helix pelodes* Pfeiffer, Proc. Zool. Soc. (Lond.), 1845, p. 126, February, 1846. North Coast (Ince). = Port Essington (Macgillivray). Figd. Pfeiffer, Syst. Conch. Cab. (Mart. & Chemn.) ed. Kuster, pl. 58, figs. 6-7, ante 1852. Reeve, Conch. Icon., Vol. vii., pl. lxxviii., sp. 353, January, 1852 (*prunum*).
1893. *Chloritis pseudoprimum* Pilsbry, Man. Conch. (Tryon), Ser. 2, Vol. viii., p. 271, pl. 55, figs. 13-15, July 1. North-western Australia = Port Darwin, Northern Territory.
Northern Territory.

PARGLOGENIA SUBGRANOSA Le Guillou, 1842.

1842. *Helix subgranosa* Le Guillou Revue Zool., 1842, p. 137, Mai no = June. North Australia. = Raffles Bay.
Northern Territory.

Note.—This appears to be the correct name for the preceding, but certainty is not yet.

PARGLOGENIA FORRESTIANA Angas, 1875.

1875. *Helix forrestiana* Angas, Proc. Zool. Soc. (Lond.), 1875, p. 389, pl. xlv., figs. 3, 3a, October 1. North West Australia.
North West Australia.

GENUS KIMBORAGA Iredale, 1933.

1933. *Kimboraga* Iredale, Rec. Austr. Mus., Vol. xix., p. 50, August 2. Orthotype, *Chloritis micromphala* Gude.

KIMBORAGA MICROMPHALA Gude, 1907.

1907. *Chloritis micromphala* Gude, Proc. Malac. Soc. (Lond.), Vol. vii., p. 231, pl. xxi., fig. 6, April 3. Barrier Range, North West Australia.
North West Australia.

[HELIX PRUNUM Férussac, 1819.

1819. *Helix prunum* Férussac, Hist. Moll., pl. xxvi., figs. 7, 8, 9; Tabl. Syst. Moll., p. 29, January, p. 25, June, 1821. Les Terres Australes; voyage de Péron, nom. nud.
1902. *Helix prunum* Fischer, Journ. de Conch., Vol. 50, pp. 385-6.

Although this name has been used for the species here named *Parglogenia pelodes*, it has been shown to be unrelated, but its identity is still unknown.]

Family XANTHOMELONTIDAE.

The typical shells of *Xanthomelon* have been dissected and shown to have an anatomy distinct from those of typical *Hadra*. These differences have been traced through a series of shells with rather unlike shell characters, and these are here grouped, though with great reservation. The typical *Xanthomelon* in the Northern Territory appears to show four distinct species, all large shells. Two are openly perforate, two have the umbilicus closed, two have the columella smooth and two the inner lip granulose. If these were otherwise distributed, they might have been regarded as forms only, but here they are seen to be clearly different entities. In Queensland a different state of affairs is seen as the largest shell always has the perforation covered and the columella and inner lip smooth. This form varies in size and form from north to south, and perhaps many species are being confused. Alongside two smaller shells are living, one with the umbilicus open the other with the perforation closed. The differentiation of these shells is difficult as all have the same general form and coloration, being a uniform green.

A collection from the Northern Territory received as this was going through the press indicates that there are many more local forms than hitherto recognised, Melville Island, Croker Island, Goulburn Island, &c., all showing representative series.

Genus XANTHOMELON Martens, 1861.

1861. *Xanthomelon* Martens, Die Heliceen (Albers), 2nd. ed., pp. xv., 174. Orthotype, *Helix pomum* Pfeiffer = *Helyx durvillii* Hombron & Jacquinot.

XANTHOMELON DURVILLII Hombron & Jacquinot, 1841.

1841. *Helyx durvillii* Hombron & Jacquinot, Ann. Sci. Nat. (Paris), Ser. ii., Vol. xvi., p. 62, July. Raffles Bay, New Holland. Figd. Voy. au Pôle Sud., Atlas, Moll., pl. 3, figs. 1-3, 1851.; Vol. v., p. 1, 1854.
1842. *Helix pomum* Pfeiffer, Symb., hist., Helic., Vol. ii., p. 37. "New Zealand?" Error = Port Essington, North Australia. Figd. Syst. Conch. Cab. (Mart & Chemn), ed. Kuster, Bd. I., Abth. xiii., pl. 55 figs. 11-13. Cox, Mon. Austr. Land Shells, p. 40, pl. iv., fig. 7, May, 1868. Northern Territory.

XANTHOMELON SPHEROIDEUM Le Guillou, 1845.

1845. *Helix spheroides* Le Guillou, Revue Zool. Soc. (Cuv.), 1845, p. 188. May no = June. Essington Bay, North Australia.
1868. *Helix edwardsi* Cox, Mon. Austr. Land Shells, p. 109, pl. xix., fig. 3, May. Liverpool River, North Coast Australia (Edwards). Not *Helix edwardsi* Bland, Ann. N.Y. Lyc. Nat. Hist., Vol. vi., p. 277, 1858.
1869. *Helix nigrilabris* Martens, Malak. Blatt., Vol. xvi., p. 79. Figd. Nov. Conch., p. 45, pl. 118, fig. 45. Interior South Australia.
1871. *Helix (Galaxias) meadei* Brazier, Proc. Zool. Soc. (Lond.), 1870, p. 662, May 2. New name for *H. edwardsi* Cox.
1876. *Helix pseudomeadei* Bednall, South Australia (Harcus), p. 186 (ded. January), ex Brazier MS. Port Darwin, North Australia. Northern Territory.

XANTHOMELON LYNDI Angas, 1872.

1872. *Helix (Xanthomelon) lyndi* Angas, Proc. Zool. Soc. (Lond.), 1872, p. 610, pl. xlii., fig. 1, November 3. Port Essington, North Australia. Northern Territory.

XANTHOMELON INTERPOSITUM *sp. nov.*

(Plate xiii., fig. 2.)

Shells, collected by Mr. T. G. Campbell at Burnside Station, Brock's Creek, Northern Territory, recall *pachystylum* in form, but show the ripple marking of *durvillii*; they are globose, with the perforation closed, the columella thickened, semitoothed, the outer lip not so expanded as in *durvillii*, the inner lip smooth, the aperture white, the outside colouring dark olive green almost brown. Height, 33 mm.; breadth, 36 mm.

Northern Territory (Brock's Creek).

XANTHOMELON PACHYSTYLUM Pfeiffer, 1845.

(Plate xiii., fig. 4.)

1845. *Helix pachystyla* Pfeiffer, Proc. Zool. Soc. (Lond.), 1845, p. 71, October. "New Zealand". Error = Port Curtis, Queensland. Figd. Reeve, Conch. Icon., Vol. vii., pl. lxx., sp. 364, January, 1852.
1894. *Thersites pachystyla* var. *subfuscozonata* Cox, Proc. Linn. Soc. N.S.W., Vol. xxiii., p. 650, May. Colour variety only = Port Curtis. Queensland.

Note.—The original shell was in the Mus. Metcalfe, measuring 43 mm. by 37 mm. The type is missing as that collection was dissipated. When MacGillivray collected the species in 1847 at Facing Island, he noted it as a new species, so obviously he had not collected it on the earlier trip in the "Fly". Consequently some locality must be selected, and as shells from Port Curtis generally agree, this is here definitely designated as the type locality. Probably many forms will be later differentiated, but two or three obvious ones must be here designated. Thus from the Whitsunday Islands the shells are very large and broad, measuring 52 mm. across, but are also tall, the height being 54 mm., the spire conical and about equal to the aperture. In Port Curtis shells the spire is more rounded and the norm measures 38 mm. in height and 40 mm. in breadth.

On the other hand, specimens from Chillagoe, North Queensland, are about the same size as those from the type locality, but are broad, with the spire little elevated. In all these the sculpture of the apex is slightly granulose but on the succeeding whorls a fine criss-cross lining can be seen disappearing on the body whorl where only concentric lines remain, vanishing below the periphery. When long series are examined from the length of Queensland many forms will be diagnosed, but at present only the extremes are being named subspecifically.

Thus the Whitsunday Islands' shells are all large and these are named *Xanthomelon pachystylum magnidicum subsp. nov.* (Plate xiii., fig. 9), the type being the Whitsunday Island specimen here figured. The Chillagoe shells have a short spire and are rather obese, and the shell figured measures 32 mm. in height, while its breadth is 37 mm. This series is named *X. p. saginatum subsp. nov.* (Plate xiii., fig. 3). Living alongside these large shells are small shells of somewhat similar form and coloration, but these can be distinguished by their sculpture, this being of the ripple nature seen in *durvillii*. A further complication occurs in that a shell superficially of the same colour, form and sculpture is openly umbilicate after the manner

of *durvillii*. The latter is known as *jannellei*, and it has the outer lip as in *pachystylum*, and the columella shows no flattening nor appression. From Keswick Island, one of southern islets of the Whitsunday Group, comes a dwarf form of *pachystylum*, a shell measuring 32 mm in breadth by 28.5 mm. in height. It is solid with the spire short, but conical, the sculpture notably criss-cross and the columella broad, flattened and closely appressed entirely closing the umbilicus. This may be called *Xanthomelon pachystylum nosciturum subsp. nov.* (Plate xiii., fig. 8).

XANTHOMELON JANNELLEI Le Guillou, 1842.

(Plate xiii., fig. 10.)

1842. *Helix jannellei* Le Guillou, Revue Zool. Soc. Cuv., 1842, p. 137, Mai no = June. North Australia = Torres Strait.

1868. *Helix pachystyloides* Cox, Proc. Zool. Soc. (Lond.), 1867, p. 725, April 3, 1868; Mon. Austr. Land Shells, p. 41, pl. v., fig. 4, May, 1868. Cape York, Queensland (Dämel).
North Queensland (Cape York).

XANTHOMELON GENETIVUM *sp. nov.*

(Plate xiii., fig. 14.)

Dead shells collected at Forsyth Island retain traces of vivid coloration, similar to that of "*nigrilabris*", but are smaller, the spire a little elevated, the granulation on the columella and inner lip being very much weaker, the outer lip not so reflected. The type is a greenish shell with the columella, inner lip and edge of outer lip brownish pink, and measures: height, 34 mm. by breadth, 31 mm.

Queensland (Forsyth Is., Wellesley Group).

Shells from Bentinck Island in the same group are dead and smaller with the spire more depressed; the coloration has been greenish and the columella, inner lip and outer lip are white, the inner lip showing granulation. The type measures: height, 25 mm. by breadth, 27 mm., and this for the present may be subspecifically named *X. genetivum lubricum subsp. nov.* (Plate xiii., fig. 11).

XANTHOMELON MINUSCULUM *sp. nov.*

(Plate xiii., fig. 13.)

Dead shells collected at Observation Island, Sir Edward Pellew Group, are miniatures for this genus, the largest reaching 24 mm. in height by the same breadth, but fully formed shells may measure only 19 mm. in height by 20 in breadth. The coloration has been green, the sculpture ripple markings, the mouth open, the outer lip expanded, the inner lip faintly granulose. The whole facies is that of the *durvillii* series, to which it may be related.

Northern Territory (Sir Edward Pellew Group).

XANTHOMELON DAEMELII Martens, 1869.

1869. *Helix pachystyla* var. *daemelii* Martens, Malak. Blatter., Voi. xvi. p. 78, April. Cape York, Queensland (Dämel).
North Queensland (Cape York).

XANTHOMELON DISTRACTUM *sp. nov.*

(Plate xiii., fig. 16.)

Shell small, recalling *pachystylum*, but with ripple markings. Coloration yellowish green. The columella is flattened and appressed closing the

umbilicus. Spire depressed making the shell broader than high, the measurements being: height 25 mm., breadth 30. Type from Mount Allam, Berseker Ranges (H. Bernhard).

South Queensland (Port Curtis district).

Genus SINUMELON Iredale, 1930.

1930. *Sinumelon* Iredale, Vict. Naturalist, Vol. xlvii., p. 120, November. Haplotype, *Helix nullarborica* Tate.
 1932. *Notobadistes* Cotton & Godfrey, South Austr. Naturalist, Vol. xiii., pp. 169-170, "August" = September 30. Orthotype, *Helix bitaeniata* Cox = *flindersi* Angas.

SINUMELON NULLARBORICUM Tate, 1879.

1879. *Helix nullarborica* Tate, Trans. Proc. Phil. Soc. Adelaide, South Austr., 1879-9 p. 133, pl. vi., figs. 1a-b., ex p. 126, *nom. nud.* Bunda Plateau, Nullarbor Plain, South Australia.
 South Australia (western limit). South West Australia (eastern limit).

SINUMELON BEDNALLI Ponsqnyby, 1904.

1904. *Xanthomelon bednalli* Ponsqnyby, Proc. Mal. Soc. (Lond.), Vol. vi., p. 182, fig. in text, September. MacDonnell Range, Central Australia.
 Central Australia (MacDonnell Ranges).

SINUMELON GODFREYI Iredale, 1933.

1933. *Sinumelon godfreyi* Iredale, Rec. Austr. Mus., Vol. xix., p. 52, August 2. New name for
 1862. *Helix angasiana* Pfeiffer, Journ. de Conch., Vol. x., p. 228, pl. x. fig. 2, July 1. Near Lake Torrens, South Australia (= Arrowie, Angas, Journ. Conch. (Leeds), Vol. i., p. 135, 1876). Refigd. Angas, Proc. Zool. Soc. (Lond.), 1876, p. 268, pl. xx., figs. 13-14. Not *Helix angasiana* Newcombe, Ann. Lyc. New York, Vol. vii., p. 283, May, 1860.
 South Australia (East of Lake Torrens).

SINUMELON EUPESUM Iredale, 1937.

1937. *Sinumelon eupesum* Iredale, South Austr. Nat., Vol. xviii., p. 45, pl. ii., fig. 1, September 30. Musgrave Ranges.
 Central Australia (Musgrave Ranges).

SINUMELON EXPOSITUM Iredale, 1937.

1937. *Sinumelon expositum* Iredale, South Austr. Nat., Vol. xviii., p. 43, pl. ii., fig. 22, September 30. Charlotte Waters.
 South Australia (Charlotte Waters).

SINUMELON FODINALE Bednall, 1892.

1892. *Helix (Hadra) fodinalis* Bednall, Trans. Roy. Soc. South Austr., Vol. xvi., p. 63, pl. i., figs. 1a-c., December, ex Tate MS. Waukaringa, South Australia.
 South Australia (Waukaringa district).

SINUMELON SERLENSE Iredale, 1937.

1937. *Sinumelon fodinale serlense* Iredale, South Austr. Nat., Vol. xviii., p. 43, pl. ii., fig. 12, September 30. Mount Serle.
 South Australia (Mount Serle district).

SINUMELON SUBFODINALE *sp. nov.*

(Plate xiii, fig. 7.)

Specimens from Silverton, Barrier Ranges, New South Wales, were so named by Tate many years ago. The shells resemble the true *fodinalis* in form and coloration, but are larger and have the umbilicus more hidden by the expansion of the columella. The coloration is pale fawn with a pale reddish band, but there is a fine granulation overrunning the coarse radial growth lines, which are however finer than in *fodinalis*. The type measures breadth, 20 mm.; height, 17 mm.

South Western New South Wales. North Western Victoria.

SINUMELON FINITINUM *sp. nov.*

(Plate xiii., fig. 6.)

Shell subglobose, pale greenish white with a pale rusty antepерipheral band, mouth white. Spire a little elevated, whorls rounded, columella reflected almost hiding the open umbilicus, outer lip thin, a little recurved. Sculpture consists of rather coarse, flattened growth lines, covered with a fine irregular granulation. Height, 22 mm.; breadth, 23 mm. Type from Broken Hill N.S.W.

Mid Western New South Wales (Broken Hill).

SINUMELON SIMULANTE *sp. nov.*

(Plate xiii., fig. 15.)

Larger than preceding, pale greenish with upper part of whorl brownish, spire more elevated and columellar appression almost closing umbilicus. The sculpture of fine flattened growth lines very rarely shows any granulation whatever. The type measures 26 mm. in breadth by 25 mm. in height. Many specimens collected by H. K. Bennett at Mossgiel and on the Lachlan River banks.

Mid Western New South Wales (Mossgiel).

SINUMELON MARSHALLI *sp. nov.*

(Plate xiii., fig. 5.)

Shells collected by A. J. Marshall at Barcaldine, Mid West Queensland, are similar to *fodinalis*, but are larger and with a more elevated spire. They are white (dead), but show no granulation, but traces of a concentric lining. The type measures 19 mm. in breadth and 17 mm. in height. This is the first record of this group from Queensland, where it probably has a wide range.

Mid West Queensland (Barcaldine).

SINUMELON FLINDERSI Angas, 1864.

1864. *Helix (Hadra) flindersi* Angas, Proc. Zool. Soc. (Lond.), 1863, p. 521, April 20, 1864, ex A. Adams & Angas MS. Tillowie, near western slopes of Flinders Range, South Australia. Figd. Cox, Mon. Austr. Land Shells, p. 51, pl. xx., fig. 11, May, 1868, from a painting of the type by Angas.
1868. *Helix bitaeniata* Cox, Mon. Austr. Land Shells, p. 50, pl. iv., fig. 9, May. Port Augusta, South Australia (Masters). Refigd. Angas, Proc. Zool. Soc. (Lond.), 1876, p. 268, pl. xx., figs. 15-16 (Masters). South Australia.

SINUMELON PETUM Iredale, 1937.

1937. *Sinumelon petum* Iredale, South Austr. Nat., Vol. xviii., p. 44 pl. ii., fig. 14, September 30. Mount Yardea, Gawler Ranges. South Australia (Gawler Ranges).

SINUMELON AVERSUM Iredale, 1937.

1937. *Sinumelon aversum* Iredale, South Austr. Nat., Vol. xviii., p. 44, pl. ii., fig. 15, September 30. Blinman, Flinders Range. South Australia (Blinman district).

SINUMELON PERINFLATUM Pfeiffer, 1864.

1864. *Helix perinflata* Pfeiffer, Proc. Zool. Soc. (Lond.), 1863, p. 528 April 20, 1864, ex Angas, p. 520, *nom nud.* MacDonnell Range, Central Australia (Waterhouse). Figd. Cox, Mon. Austr. Land Shells, p. 45, pl. xx., fig. 2, May, 1868, from a painting of the type by Angas. Central Australia (MacDonnell Range).

SINUMELON IMPLETUM Iredale, 1937.

1937. *Sinumelon impletum* Iredale, South Austr. Nat., Vol. xviii., p. 44, pl. i., fig. 1, September 30. Birksgate Ranges. Central Australia (Birksgate Ranges).

SINUMELON PEDASUM Iredale, 1937.

1937. *Sinumelon pedasum* Iredale, South Austr. Nat., Vol. xviii., p. 44, pl. ii., fig. 2, September 30. Musgrave Ranges. Central Australia (Musgrave Ranges).

SINUMELON REMISSUM Iredale, 1937.

1937. *Sinumelon remissum* Iredale, South Austr. Nat., Vol. xviii., p. 45, pl. ii., fig. 4, September 30. Wilson, east Flinders Range. South Australia (Wilson district).

SINUMELON CORINUM Iredale, 1937.

1937. *Sinumelon corinum* Iredale, South Austr., Nat. Vol. xviii., p. 46, pl. ii., fig. 5, September 30. Everard Ranges. Figd. Bednall, Trans. Roy. Soc. South Austr., Vol. xvi., p. 62, pl. i., fig. 6, December, 1892. Central Australia (Everard Ranges).

SINUMELON PUMILIO Iredale, 1937.

1937. *Sinumelon pumilio* Iredale, South Austr., Nat. Vol. xviii., p. 45, pl. ii., fig. 11, September 30. Everard Ranges. Central Australia (Everard Ranges).

Genus GRANULOMELON Iredale, 1933.

1933. *Granulomelon* Iredale, Rec. Austr. Mus., Vol. xix., p. 51, August 2. Orthotype, *Hadra grandituberculata* Tate.

GRANULOMELON GRANDITUBERCULATUM Tate, 1894.

1894. *Hadra grandituberculata* Tate, Trans. Roy. Soc. South Austr., Vol. xviii., p. 193, November. Central Australia = Maude River, Hart Range. Figd. Rep. Horn. sci. Exped. Cent. Austr., pl. ii., Zool., p. 200, pl. xviii., fig. 11, February, 1896. Central Australia (Hart Ranges).

Genus BASEDOWENA Iredale, 1937.

1937. *Basedowena* Iredale South Austr. Nat., Vol. xviii., p. 51, September 30. Orthotype, *B. cottoni* Iredale.

BASEDOWENA COTTONI Iredale, 1937.

1937. *Basedowena cottoni* Iredale, South Austr. Nat., Vol. xviii., p. 51, pl. ii., fig. 24, September 30. Musgrave Ranges, Central Australia (H. Basedow).
Central Australia (Musgrave Ranges).

Genus PLEUROXIA Ancey, 1887.

1887. *Pleuroxia* Ancey, Conch. Exchange, Vol. ii., pt. 3, p. 38, September. New name for.
1864. *Angasella* Angas, Proc. Zool. Soc. (London), 1863, p. 521 April 20, 1864, ex A. Adams MS. Haplotype, *Helix cyrtopleura* Pfeiffer.
Not *Angasiel'a* Crosse, Journ. de Conch., Vol. xii., p. 50, footnote, January 1, 1864.

PLEUROXIA CYRTOPLEURA Pfeiffer, 1862.

1862. *Helix cyrtopleura* Pfeiffer, Journ. de Conch., Vol. x., p. 227, pl. x., fig. 4, July 1. Near Lake Torrens, South Australia (probably Arrowie).
South Australia.

PLEUROXIA PHILLIPSIANA Angas, 1873.

1873. *Helix (Angasella) phillipsiana* Angas Proc. Zool. Soc. (Lond.), 1873, p. 183, pl. xx., fig. 4, June. Arrowie, interior of South Australia.
South Australia.

PLEUROXIA MAWSONI Iredale, 1937.

1937. *Pleuroxia mawsoni* Iredale South Austr. Nat., Vol. xviii., p. 48, pl. ii., fig. 17, September 30. Grampus Range, South Australia.
South Australia (Grampus Range).

PLEUROXIA POLYPLEURA Tate, 1899.

1899. *Angasella polypleura* Tate, Trans. Roy. Soc. South Austr., Vol. xxiii., p. 246, pl. vi., figs. 2a-c., December. Bunda Plateau, Great Australian Bight, South Australia.
South Australia (western limit). South West Australia (eastern limit).

PLEUROXIA ARCIGERENS Tate, 1894.

1894. *Hadra arcigerens*, Tate, Trans. Roy. Soc. South Austr., Vol. xviii., p. 193, November. Central Australia. Figd. Rep. Horn. Sci. Exped. Cent. Austr., pt. ii. Zool., p. 192, pl. xix., fig. 27, February, 1896. Finke River Escarpment.
Central Australia (Finke River district).

PLEUROXIA OLIGOPLEURA Tate, 1894.

1894. *Hadra oligopleura* Tate, Trans. Roy. Soc. South Austr., Vol. xviii., p. 193, November. Eyre's Sand Patch, 160 miles west from Eucla, West Australia (Adcock). Figd. Rep. Horn. Sci. Exped. Cent. Austr., pt. ii., Zool., p. 21, pl. xix., fig. 39, February, 1896. "Flinders Range, South Australia". Error only from interchange of localities with *H. wilpenensis*.
South West Australia (eastern limits). South Australia (western limit).

PLEUROXIA RADIATA Hedley, 1905.

1905. *Xanthomelon radiatum* Hedley, Trans. Roy. Soc. South Austr., Vol. xxix., p. 163, pl. xxx., figs. 4-5-6, December. Mount Davies, Tomkinson Ranges.
Central Australia.

PLEUROXIA LEMANI Gude, 1916.

1916. *Angasella lemani* Gude, Proc. Mal. Soc. (Lond.), Vol. xii., p. 41, fig. in text, March 20. Cape Borda, Kangaroo Island. South Australia (Kangaroo Island).

PLEUROXIA ADCOCKIANA Bednall, 1894.

1894. *Hadra adcockiana* Bednall, Trans. Roy. Soc. South Austr., Vol. xviii., p. 190, fig. in text November. Tempe Downs Station, Central Australia. Central Australia.

PLEUROXIA TRUCA Iredale, 1937.

1937. *Pleuroxia truca* Iredale, South Austr., Nat., Vol. xviii., p. 49, pl. ii., fig. 8, September 30. Krickaueff Range. Central Australia (Krickaueff Range).

PLEUROXIA EVERARDENSIS Bednall, 1892.

1892. *Helix (Hadra) everardensis* Bednall, Trans. Roy. Soc. South Austr., Vol. xvi., p. 64, pl. i., figs. 3a-c, December. Everard Range, 2,000 feet, Central Australia. Central Australia (Everard Range).

PLEUROXIA GASCOYNENSIS Smith, 1894.

1894. *Helix (Trachia) gascoynensis* Smith, Proc. Mal. Soc. (Lond.), Vol. i., p. 93, pl. vii., figs. 13, June. Gascoyne district, West Australia. Western Australia (Gascoyne district).

Genus BACCALENA Iredale, 1937.

1937. *Baccalena* Iredale, South Austr. Nat., Vol. xviii., p. 50, September 30. Haplotype, *Hadra squamulosa* Tate.

BACCALENA SQUAMULOSA Tate, 1894.

1894. *Hadra squamulosa* Tate, Trans. Roy. Soc. South Austr., Vol. xviii., p. 193, November. Central Australia. Figd. Rep. Horn. Sci. Exped. Cent. Austr., pt. ii., Zool., p. 193, pl. xviii., fig. 10, February, 1896 (Palm Creek, Krickaueff Range).
1896. (*Chloritis*) *ophioderma* Tate, Rep. Horn. Sci. Exped. Cent. Austr., pt. ii., Zool., p. 194, February. New name only. Central Australia (Krickaueff Range).

Genus FATULABIA Iredale, 1937.

1937. *Fatulabia* Iredale, South Austr. Nat., Vol. xviii., p. 51, September 30. Haplotype, *Helix elderi* Bednall.

FATULABIA ELDERI Bednall, 1892.

1892. *Helix (Hadra) elderi* Bednall, Trans. Roy. Soc. South Austr., Vol. xvi., p. 64, pl. i., figs. 2a-c, 4-5, December. Birksgate Range, Central Australia. Central Australia (Birksgate Range).

FATULABIA MUSGA Iredale, 1937.

1937. *Pleuroxia musga* Iredale, South Austr. Nat., Vol. xviii., p. 50, pl. ii., fig. 3, September 30. Musgrave Ranges, Central Australia. Central Australia (Musgrave Ranges).

FATULABIA WILPENENSIS Tate, 1894.

1894. *Hadra wilpenensis* Tate, Trans. Roy. Soc. South Austr., Vol. xviii., p. 193, November. "Central Australia".
1896. *Thersites wilpenensis*, Tate, Rep. Horn. Sci. Exped., Cent. Austr., pt. ii., Zool., p. 219 (no text), pl. xix., fig. 28, February. "Eyre's Sand Patch, Western Australia". Error through interchange of localities with *A. oligopleura*, "Flinders Range, South Australia", i.e.: Six miles east of Wilpena Pound, South Australia (Tomsett). South Australia (Wilpena Pound district).

FATULABIA HINSBYI Gude, 1916.

1916. *Angasella hinsbyi* Gude, Proc. Mal. Soc. (Lond.), Vol. xii., p. 42, fig. in text, March 20, ex Brazier MS. Mitchell district, Silvertown, New South Wales. New South Wales (Broken Hill). (South Australia).

GENUS GLYPTORHAGADA Pilsbry, 1890.

1890. *Glyptorhagada* Pilsbry, Man. Conch. (Tryon), Ser. 2, Vol. vi., p. 191, December 16. Logotype, Pilsby, *ibid.*, Vol. ix., p. 129 1892, *Helix silveri* Angas.
1933. *Eximiorhagada* Iredale, Rec. Austr. Mus. Vol. xix., p. 51, August 2. Orthotype, *Xanthomelon asperrimum* Hedley.
1933. *Halinatorhagada* Iredale, Rec. Austr. Mus., Vol. xix., p. 51, August 2. Orthotype, *Helix bordaensis* Angas.

GLYPTORHAGADA CLYDONIGERA Tate, 1894.

1894. *Hadra clydonigera* Tate, Trans. Roy. Soc. South Austr., Vol. xviii., p. 193, November, Central Australia. Figd. Rep. Horn. Sci. Exped. Cent. Austr., pt. ii., Zool., p. 195, pl. xix. figs 2-4, February, 1896. MacDonnell Ranges. Central Australia (MacDonnell Ranges).

GLYPTORHAGADA HERBERTI Iredale, 1937.

1937. *Glyptorhagada herberti* Iredale, South Austr., Nat., Vol. xviii., p. 53, pl. ii., figs. 19, September 30. Musgrave Ranges, Central Australia.
1905. *Xanthomelon clydonigerum* var., Hedley, Trans. Roy. Soc. South Austr., Vol. xxix., p. 162 pl. xxx., figs. 10, 11, 12, December. Central Australia (Musgrave Ranges).

GLYPTORHAGADA SILVERI Angas, 1868.

1868. *Helix (Rhagada) silveri* Angas, Proc. Zool. Soc. (Lond.), 1868, p. 257, text in figs., September 15. Eastern Plains, South Australia (S. W. Silver). South Australia (Eastern Plains).

GLYPTORHAGADA KOORINGENSIS Angas, 1877.

1877. *Helix (Rhagada) kooringensis* Angas, Proc. Zool. Soc. (Lond.), 1877, p. 33, fig. in text, June 1. 30 miles N.E. from Burra Mines, South Australia (F. G. Waterhouse). South Australia (Kooringa district).

GLYPTORHAGADA PECUNIOSA Iredale, 1937.

1937. *Glyptorhagada pecuniosa* Iredale, South Austr. Nat., Vol. xviii., p. 54, pl. ii., fig. 10, September 30. Mannahill, north from Kooringa, South

Australia. Figd. Cox, Proc. Linn. Soc. N.S.W., Ser. 2, Vol. ii., p. 1062, 1887 (animal).

South Australia (range north of the preceding).

GLYPTORHAGADA ASFERRIMA Hedley, 1905.

1905. *Xanthomelon asperrimum* Hedley, Trans. Roy. Soc. South Austr., Vol. xxix., p. 164, 3 text figs., December. Mann Ranges, Central Australia.

Central Australia (Mann Ranges).

GLYPTORHAGADA EUGLYPTA Tate, 1899.

1899. *Glyptorhagada euglypta* Tate, Trans. Roy. Soc. South Austr., Vol. xxiii., p. 245, pl. vi., figs. 3a-c., December. Anabama, 100 miles N.E. from Burra Burra, S.A. (Brown).

South Australia (Anabama district).

GLYPTORHAGADA BORDAENSIS Angas, 1880.

1880. *Helix bordaensis* Angas, Proc. Zool. Soc. (Lond.), 1880, p. 419, pl. xl., fig. 3, October 1. Kangaroo Is., South Australia.

South Australia (Kangaroo Island).

Genus DIVELLOMELON Iredale, 1933.

1933. *Divellomelon* Iredale Rec. Austr. Mus., Vol. xix., p. 51, August 2. Orthotype, *Thersites hillieri* Smith.

DIVELLOMELON HILLIERI Smith, 1910.

1910. *Thersites hillieri* Smith, Proc. Malac. Soc. (Lond.), Vol. ix., p. 26, fig. in text, March 31. Hermannsburg, South Central Australia.

Central Australia.

Genus BAUDINELLA Thiele, 1931.

1931. *Baudinella* Thiele, Handbuch syst. Weicht., Vol. i., p. 685. Orthotype, *Helix baudinensis* Smith.

1933. *Gonobaudinia* Iredale, Rec. Austr. Mus., Vol. xix., p. 55, August 2. Orthotype, *Helix baudinensis* Smith.

BAUDINELLA BAUDINENSIS Smith, 1893.

1893. *Helix (Gonostoma) baudinensis* Smith, The Conchologist, Vol. ii., p. 97, fig. in text, March 25. Baudin Is., North West Australia (J. J. Walker).

North West Australia (Baudin Island).

Genus SETOBAUDINIA Iredale, 1933.

1933. *Setobaudinia* Iredale, Rec. Austr. Mus., Vol. xix., p. 55, August 2. Orthotype, *Helix collingii* Smith.

SETOBAUDINIA COLLINGII Smith, 1893.

1893. *Helix (Gonostoma) collingii* Smith, The Conchologist, Vol. ii., p. 98, fig. in text, March 25. Baudin Is., North West Australia (J. J. Walker).

North West Australia (Baudin Island).

Genus CRISTIGIBBA Tapparone-Canefri, 1883.

1883. *Cristigibba* Tapparone-Canefri, Ann. Mus. Civ. Genova, Vol. xix., pp. 161-171, July 5. Orthotype, *Helix tortilabia* Lesson.

1933. *Australgibba* Iredale, Rec. Austr. Mus., Vol. xix., p. 55, August 2. Orthotype, *Helix wesselensis* Cox.

CRISTIGIBBA (AUSTRALGIBBA) WESSELENSIS COX, 1868.

1868. *Helix wesseleensis* Cox, Mon. Austr. Land Shells, p. 110, pl. xix., figs. 4a-b., May. Wessel Is., North Coast of Australia (J. M. Creed). Northern Territory (Wessel Island).

Genus ARNEMELASSA Iredale, 1933.

1933. *Arnemelassa* Iredale, Rec. Austr. Mus., Vol. xix., p. 55, August 2. Orthotype, *Helix creedi* Cox.

ARNEMELASSA CREEDI COX, 1868.

1868. *Helix creedi* Cox, Mon. Austr. Land Shells p. 110, pl. xix., figs. 2-2a, May. Cadell's Straits, North Coast Australia (J. M. Creed). Northern Territory.

Genus TORRESITRACHIA Iredale, 1933.

1933. *Torresitrachia* Iredale, Rec. Austr. Mus., Vol. xix., p. 55, August 2. Orthotype, *Helix endeavourensis* Brazier.

TORRESITRACHIA TORRESIANA Hombron & Jacquinot, 1814.

1841. *Helix torresiana* Hombron & Jacquinot, Ann. Sci. Nat. (Paris), Ser. 2, Vol. xvi., p. 63, July. Ile Toud, Torres Strait. Figd. Voy. au Pôle Sud., Atlas, Moll., pl. 4, figs. 24-27, 1851; Vol. v., p. 10, 1854.
1842. *Helix delessertiana* Le Guillou, Revue Zool. Soc. Cuv., 1842, p. 138, Mai no = June. Ile Warrior, Torres Strait.
1846. *Helix taranaki* Pfeiffer, Symb. hist. Helic., Vol. iii., p. 74, ex Gray MS. "New Zealand error = Possession Is., Torres Strait. *Fide* Reeve, Conch. Icon., Vol. vii., pl. 83, sp. 443, 1852, who also cited Gray, N.Z., App., pl. i., figs. 6-7, which was never issued.
1851. *Helix torresii* Forbes, Narr. Voy. Rattlesnake (MacGillivray), Vol. ii., p. 370, as of "H. & J. Atlas", in synonymy.
1867. *Helix leucolena* Crosse, Journ. de Conch., Vol. xv., p. 447, October 1; *id.*, Vol. xvi., p. 171, pl. vi., fig. 6, April, 1868. "Vanuea Levi, Fiji". Error = North Queensland, Cf. Ancey, Journ. de Conch., Vol. lii., p. 296, December 25, 1904.
1872. *Helix (Trachia) endeavourensis* Brazier, Proc. Zool. Soc. (Lond.), 1871, p. 640, May 2, 1872. Endeavour River, North Coast. North Queensland.

Note.—*Helix (Trachia) dentoni* Ford, Nautilus, Vol. iii., p. 17, fig. in text, June, described as from New Guinea, collected by W. Denton, is supposed to be referable to this species, and not from New Guinea.

TORRESITRACHIA STIPATA *sp. nov.*

(Plate xii., fig. 27.)

Shells from the Sir Edward Pellew Group in the Gulf of Carpentaria collected by Dr. W. E. J. Paradise are very like *torresiana*, but are more compressed, umbilicus wider, the sculpture stronger and more regular, more marked on the base, the mouth shallower and smaller. The type measures 19 mm. in breadth and 10 mm. in height.

Northern Territory (Sir Edward Pellew Group).

TORRESITRACHIA BATHURSTENSIS Smith, 1894.

1894. *Helix (Trachia) bathurstensis* Smith, Proc. Mal. Soc. (Lond.), Vol. i., p. 93, pl. vii., fig. 20, June. Heywood Is. and Bathurst Is., King Sound, North West Australia. North West Australia.

TORRESITRACHIA ACUTICOSTATA Fulton, 1907.

1907. *Planispira (Trachiopsis) acuticostata* Fulton, Proc. Malac. Soc. (Lond.), Vol. vii., p. 362 fig. in text, September. Dalrymple, Queensland.
North Queensland (South of Townsville).

TORRESITRACHIA GLOMERANS *sp. nov.*

(Plate xiii., fig. 12.)

About Chillagoe, North Queensland, Mr. W. D. Campbell collected numbers of globose shells varying in height and with the base sculptured. The shell is subglobose, spire short, elevated narrowly but openly umbilicated, the mouth large, the outer lip reflected, the columella triangularly reflected but not concealing the umbilicus. The sculpture consists of slanting ribs, very regular and closely packed and these continue strongly on to the base. Colour of dead shell white, living translucent. Height, 22 mm.; breadth, 28 mm.

North Queensland (Chillagoe district).

The globose form suggests separation, and therefore a new subgeneric name *Melostrachia* is introduced with this species as type.

Genus TROZENA *nov.*Type, *T. morata sp. nov.*

Related to *Trachiopsis* but larger and acutely peripherally keeled; the umbilicus wider, the mouth comparatively smaller, sculpture similar, but apex of $1\frac{1}{2}$ whorls regularly coarsely granulose.

TROZENA MORATA *sp. nov.*

(Plate xii., fig. 18.)

Shell flattened, spire little elevated, whorls four succeeding apex; sculpture coarse radials irregularly sparsely grained, grains more numerous on base where radials are finer. Breadth of type from Chillagoe, 11 mm.; height, 5 mm.

North Queensland (Chillagoe district).

Genus TRACHIOPSIS Pilsbry, 1893.

1893. *Trachiopsis* Pilsbry, Man. Conch (Tryon), Ser. 2, Vol. viii., p. 284, July 1. Orthotype, *Helix tuckeri* Pfeiffer.

TRACHIOPSIS TUCKERI Pfeiffer, 1846.

1846. *Helix tuckeri* Pfeiffer, Symb. hist. Helic., Vol. iii., p. 77. Sir Charles Hardy's Is. (Queensland), (B. W. Tucker). Figd. Syst. Conch. Cab. (Mart & Chemn), ed. Kuster, pl. 79, figs. 10-12, 1851. Reeve, Conch. Icon., Vol. vii., pl. cxi., fig. 633, August, 1852
North Queensland.

TRACHIOPSIS STRANGULATA Hombron & Jacquinot, 1841.

1841. *Helyx strangulata* Hombron & Jacquinot, Ann. Sci. Nat. (Paris), Ser. 2, Vol. xvi., p. 64, July. Ile Toud, Torres Strait. Figd. Voy. av. Pôle Sud., Atlas, Moll., pl. 6, figs. 1-4, 1851.
1842. *Helix cyclostomata* Le Guillou, Rev. Zool. Soc. Cuv., 1842, p. 141, Mai no = June. L'île Warrior, Torres Strait. Figd. Cox, Mon. Austr. Land Shells, p. 61, pl. x., fig. 12, May, 1868.
North Queensland (Islands in Torres Strait).

TRACHIOPSIS TRUCULENTA Hedley, 1912.

1912. *Planispira trunculenta* Hedley, Rec. Austr. Mus., Vol. viii., p. 156, May 6. New name for *P. tuckeri* as figured by Pilsbry, Man. Conch., Ser. 2 Vol. ix., pl. xix., figs. 18-19, 1894. Port Curtis, Queensland. South Queensland (Port Curtis district).

TRACHIOPSIS MUCOSA Cox, 1868.

1868. *Helix mucosa* Cox, Proc. Zool. Soc. (Lond.), 1867, p. 725, April 3, 1868. Mon. Austr. Land Shells, p. 19, pl. xi., fig. 14, May, 1868. Clarence River, N.S.W. (J. MacGillivray). Northern New South Wales. South Queensland.

Note.—Apparently this group ranges from Torres Strait Islands down into Northern New South Wales, and there may be many more forms to be determined.

Family RHAGADIDAE.

This family is necessary for the reception for the curious North West Australian land shells. These have no close relation with other molluscan forms from East or South Australia; but apparently are closely related to East Indian species, suggesting an entry into Australia by means of the Timor Sea. They live in limestone districts and apparently many species and genera occur together, although there seem to be geographical series.

Genus RHAGADA Albers, 1861.

1861. *Rhagada* Albers, Die Heliceen, 2nd ed. (Martens), p. 108, "1860". Orthotype, *Helix reinga* Gray = *torulus* Férussac.

RHAGADA TORULUS Férussac, 1819.

1819. *Helix torulus* Férussac, Hist. Moll., liv. 6, pl. xxviii., figs. 3-4, November. Syst. Tabl. Hist. Moll., p. 34, January; p. 30, June, 1821. New Holland (Péron) = Shark's Bay, W.A.
1846. *Helix reinga* Pfeiffer, Symb. Helic., Vol. iii., p. 73, ex Gray MS. New Zealand, error = Shark's Bay, W.A. Figd. Reeve, Conch. Icon., Vol. vii., pl. 128, sp. 772, October, 1852. West Australia (Shark's Bay district).

RHAGADA CONVICTA Cox, 1870.

1870. *Helix convicta* Cox, Proc. Zool. Soc. (Lond.), 1870, p. 171, pl. xvi., fig. 6, November 11. Nichol Bay, West Australia. West Australia (Nichol Bay).

RHAGADA ELACHYSTOMA Martens, 1877.

1877. *Helix elachystoma* Martens, Monatsb. Ak. Berlin, 1877, p. 273, pl. i., figs. 8-9. Mermaid Strait, North West Australia (T. Studer). West Australia (Mermaid Strait district).

RHAGADA RICHARDSONII Smith, 1874.

1874. *Helix richardsonii* Smith, Zool. Voy. Erebus and Terror, Moll., p. 2, pl. 4, fig. 14. Dupuch's Is., West Australia. (Stokes per Richardson. Collected by Dring.) West Australia (Dupuch's Island).

RHAGADA RADLEYI Preston, 1908.

1908. *Rhagada radleyi* Preston, Proc. Malac. Soc. (Lond.), Vol. viii., p. 120, text fig., July 20. Western Australia. West Australia.

RHAGADA TESCORUM Benson, 1853.

1853. *Helix tescorum* Benson, Ann. Mag. Nat. Hist., Ser. ii., Vol. vi., p. 30, January 1. Shark's Bay, West Australia. Figd. Reeve, Conch. Icon., Vol. vii., p. 171, sp. 1154, October, 1853. West Australia (Shark's Bay district).

RHAGADA OSCARENSIS Cox, 1892.

1892. *Helix (Hadra) oscarensis* Cox, Proc. Linn. Soc. N.S.W., Vol. vi., p. 565, pl. xx., figs. 6-7, May 23. Oscar Ranges, 20 milès from Derby, N.W.A. (Coll. W. W. Froggatt.).
1894. *Helix (Rhagada) inconvicta* Smith, Proc. Malac. Soc. (Lond.), Vol. i., p. 90, pl. vii., fig. 10, June. Oscar Ranges, 120 miles S.E. of King Sound, N.W.A. North West Australia (Oscar Ranges).

Genus PLECTORHAGADA Iredale, 1933.

1933. *Plectorhagada* Iredale, Rec. Austr., Mus., Vol. xix., p. 52, August 2. Orthotype, *Helix plectilis* Benson.

PLECTORHAGADA PLECTILIS Benson, 1853.

1853. *Helix plectilis* Benson, Ann. Mag. Nat. Hist., Ser. ii., Vol. xi., p. 29, January 1. Shark's Bay, West Australia. Figd. Reeve, Conch. Icon., Vol. vii., pl. 172, sp. 1162, October, 1853. Cox, Mon. Austr. Land Shells, p. 44, pl. xx., fig. 8, May, 1868, from a painting of the type by Angas.
1854. *Helix paleata* Reeve, Conch. Icon., Vol. vii., pl. 199, sp. 1399, December. "Banks of the Swan River, Australia, (Bacon)". Error = Shark's Bay, Western Australia.
1864. *Helix carcharias* Pfeiffer, Proc. Zool. Soc. (Lond.), 1863, p. 528, April 20, 1864. Shark's Bay, Western Australia. Figd. Cox, Mon. Austr. Land Shells, p. 45, pl. xx., fig. 12, May 1, 1868, from a painting of the type by Angas. West Australia (Shark's Bay).

Genus AMPLIRHAGADA Iredale, 1933.

1933. *Amplirhagada* Iredale, Rec. Austr. Mus., Vol. xix., p. 52, August 2. Orthotype, *Helix sykesi* Smith.

AMPLIRHAGADA SYKESI Smith, 1894.

1894. *Helix (Hadra) sykesi* Smith Proc. Mal. Soc. (Lond.), Vol. i., p. 92, pl. vii., fig. 8, June. Parry Island, Admiralty Gulf. North West Australia (Parry Island).

AMPLIRHAGADA MONTALIVETENSIS Smith, 1894.

1894. *Helix (Hadra) montalivetensis* Smith, Proc. Mal. Soc. (Lond.), Vol. i., p. 91, pl. vii., fig. 21, June. Montalivet Island. North West Australia (Montalivet Island).

AMPLIRHAGADA COMBEANA *nom. nov.*

1894. *Helix (Hadra) imitata* var. *cassiniensis* Smith, Proc. Mal. Soc. (Lond.), Vol. i., p. 92, pl. vii., fig. 16, June. Cassini Island, North West Australia. Not *Helix millepunctata* var. *cassiniensis* Smith, *l.c.* North West Australia (Cassini Island).

AMPLIRHAGADA IMITATA Smith, 1894.

1894. *Helix (Hadra) imitata* Smith Proc. Mal. Soc. (Lond.), Vol. i., p. 92,

pl. vii., fig. 15, June. Baudin Island.
North West Australia (Baudin Island).

AMPLIRHAGADA BURNERENSIS Smith, 1894.

1894. *Helix (Hadra) burnerensis* Smith, Proc. Mal. Soc. (Lond.), Vol. i., p. 91, pl. vii., fig. 18, June. Burner (error for Barrier) Ranges, Derby district, North West Australia.
North West Australia (Barrier Ranges).

Genus PARRHAGADA *nov.*

Type, *Thersites woodwardi* Fulton.

Large Rhagadoid shells of depressed form, imperforate or perforate, but with the outer lip expanded giving it a flaring appearance.

PARRHAGADA WOODWARDI Fulton, 1902.

1902. *Thersites (Rhagada) woodwardi* Fulton, Proc. Mal. Soc. (Lond.), Vol. v., p. 33, fig. in text., April. North West Australia (B. H. Woodward).
North West Australia.

Genus GLOBORHAGADA Iredale, 1933.

1933. *Globorhagada* Iredale, Rec. Austr. Mus., Vol. xix., p. 52, August 2. Orthotype, *Helix prudhoensis* Smith.

GLOBORHAGADA PRUDHOENSIS Smith, 1894.

1894. *Helix (Hadra) prudhoensis* Smith, Proc. Mal. Soc. (Lond.), Vol. i., p. 91, pl. vii., fig. 9, June. Prudhoe Island, North West Australia (Lieut. J. W. Combe, H.M.S. Penguin).
North West Australia (Prudhoe Island).

GLOBORHAGADA LEPTOGRAMMA Pfeiffer, 1846.

1846. *Helix leptogramma* Pfeiffer, Proc. Zool. Soc. (Lond.), 1845, p. 127, February, 1846. Cygnet Bay, North Australia (Ince). Figd. Reeve, Conch. Icon., Vol. vii., pl. 82, sp. 437, March 1852. Copied Cox, Mon. Austr. Land Shells p. 41, pl. x., fig. 4, May, 1868.
North West Australia (Derby district).

GLOBORHAGADA MONTEBELLOENSIS Preston, 1914.

1914. *Rhagada montebelloensis* Preston, Proc. Mal. Soc. (Lond.), Vol. xi., p. 13, fig. in text., March 30. Montebello Island.
North West Australia (Montebello Island).

GLOBORHAGADA OBLIQUIRUGOSA Smith, 1894.

1894. *Helix (Hadra) obliquirugosa* Smith, Proc. Mal. Soc. (Lond.), Vol. i., p. 90, pl. vii., fig. 17, June. Parry Harbour, North West Australia.
North West Australia (Parry Harbour).

Genus BELLRHAGADA *nov.*

Type, *Rhagada plicata* Preston.

The little species named *plicata* Preston is unlike any other West Australian shell, somewhat globose, imperforate (or perforate) sutures almost canaliculate, mouth subcircular, lip little expanded; apical whorls large and smooth, upper part of later whorls radially sculptured, the sculpture much weaker on the base.

BELLRHAGADA PLICATA Preston, 1914.

1914. *Rhagada plicata* Preston, Proc. Mal. Soc. (Lond.), Vol. xi., p. 13, fig. in text., March 30. Montebello Island.
North West Australia (Montebello Island).

[*HELIX DRINGI* Pfeiffer, 1846.

1846. *Helix dringi* Pfeiffer, Symb. Helic., Vol. iii., p. 73. East Australia. Figd. Reeve, Conch. Icon., Vol. vii., pl. 28, sp. 769, October, 1852.

This species from "near Torres Strait, collected by Dring", looks like a *Torresitrachia*, but is imperforate suggesting a Rhagadoid affinity. Dring collected mostly on the West Coast. The type is unique.]

Genus WESTRALTRACHIA Iredale, 1933.

1933. *Westraltrachia* Iredale, Rec. Austr. Mus., Vol. xix., p. 55, August 2. Orthotype, *Trachia froggatti* Ancey.

WESTRALTRACHIA FROGGATTI Ancey, 1898.

1898. *Trachia froggatti* Ancey, Proc. Linn. Soc. N.S.W., Vol., xxii., p. 774, pl. xxxvi., fig. 2, June 4. Oscar Range 100 miles inland from Derby, North West Australia (W. W. Froggatt).
North West Australia.

WESTRALTRACHIA MONOGRAMMA Ancey, 1898.

1898. *Trachia monogramma* Ancey, Proc. Linn. Soc. N.S.W., Vol. xxii., p. 775, pl. xxxvi., fig. 3, June 4. Oscar Range, North West Australia (W. W. Froggatt).
North West Australia.

WESTRALTRACHIA DERBYI COX, 1892.

1892. *Helix (Hadra) derbyi* Cox, Proc. Linn. Soc. N.S.W., Ser. 2, Vol. vi., p. 566, pl. xx., figs. 4-5 May 23. Derby district, North West Australia (W. W. Froggatt).

1894. *Helix (Trachia) derbyana* Smith, Proc. Mal. Soc. (Lond.), Vol. i., p. 92, pl. vii., fig. 19, June. Burner = Barrier Ranges, Derby, North West Australia.
North West Australia.

WESTRALTRACHIA ORTHOCHEILA Ancey, 1898.

1898. *Trachia orthocheila* Ancey, Proc. Linn. Soc. N.S.W., Vol. xxii., p. 774, pl. xxxvi., fig. 4, June 4. Oscar Range 100 miles inland from Derby, North West Australia (W. W. Froggatt).
North West Australia.

Note.—It will be noted that all the species of *Westraltrachia* were collected by W. W. Froggatt, and while the first named is very distinct the others are not so easily separable from each other.

Super Family PARYPHANTOIDEA

The Austral-Neozelanic carnivorous snails are here classed together under the above heading. Thiele (Handb. syst. Weicht, Teil 2, p. 722, 1931) introduced a Stirps Streptaxacea, which is one of his many artificial groups, its contents being the families Haplotrematidae, Paryphantidae, Aperidae and Streptaxidae. These families have no close relationship whatever as any one conversant with these snails in nature will admit. Therefore the correct nomination will depend on the use the earliest Austral Neozelanic name as basis for a super family name as obviously there is more than one family in Australia alone.

Family PARYPHANTIDAE

This Neozelanic family appears to be represented in Australia by *Victaphanta* and its allies. Mr. A. W. B. Powell has told me that the anatomy of the Victorian species is very similar to that of the Neozelanic forms. The Rhytidoid species appear to deserve separation, as undoubtedly they con-

stitute a distinct series in Australia. Large and small species range from Tasmania to Cape York, none of which shows any Paryphantoid facies.

Genus *VICTAPHANTA* Iredale, 1933.

1933. *Victaphanta* Iredale, Rec. Austr. Mus., Vol. xix., p. 40, August 2. Orthotype, *Nanina atramentaria* Shuttleworth.

VICTAPHANTA ATRAMENTARIA Shuttleworth, 1853.

1853. *Nanina atramentaria* Shuttleworth, Mitth. Nat. Gesell. Berne, 1852, p. 194, Port Phillip, Victoria. Figd. Cox, Mon. Austr. Land Shells, p. 5, pl. iii., fig. 2, May, 1868. Figd. Not. Malac. (Shuttleworth), heft. ii., ed. Fischer, Paryphanta, p. 5, pl. i. fig. 2, 1877. Victoria.

VICTAPHANTA COMPACTA Cox & Hedley, 1912.

1912. *Paryphanta compacta* Cox & Hedley, Mem. Nat. Mus., Melb., No. 4, 8, pl. i., figs. 3-5 February. Otway Ranges, Victoria. Victoria (Otway Ranges).

Genus *MELAVITRINA* Iredale, 1933.

1933. *Melavitrina* Iredale, Rec. Austr., Mus., Vol. xix. p. 40, August 2. Orthotype, *Vitrina milligani* Pfeiffer.

MELAVITRINA MILLIGANI Pfeiffer, 1854.

1854. *Vitrina milligani* Pfeiffer, Proc. Zool. Soc. (Lond.), 1852, p. 56, March 22, 1854. Macquarie Harbour, Tasmania. Figd. Cox, Mon. Austr. Land Shells, p. 82, pl. xiv., figs. 2-2a, May, 1868. Tasmania (West Coast).

MELAVITRINA FUMOSA Tenison-Woods, 1878.

1878. *Helicarion fumosa* Tenison-Woods, Proc. Linn. Soc. N.S.W., Vol. ii., p. 124, pl. xii., figs. 3-3a, December. Tasmania = Duck River, North East Coast (Petterd). Tasmania (North East Coast).

Genus *PROLESOPHANTA* Iredale, 1933.

1933. *Prolesophanta* Iredale, Rec. Austr. Mus., Vol. xix., p. 40, August 2. Orthotype, *Helix dyeri* Petterd.

PROLESOPHANTA DYERI Petterd, 1879.

1879. *Helix dyeri* Petterd, Mon. Land Shells Tasm., p. 40, April. Launceston, Tasmania Figd. Hedley and Petterd, Rec. Austr. Mus., Vol. vii., p. 287, pl. 86, figs. 38-40, 1909. Tasmania (North East). Victoria?

Genus *SALADELOS* Iredale, 1933.

1933. *Saladelos* Iredale, Rec. Austr. Mus., Vol. xix., p. 48, August 2. Orthotype, *Helix splendidula* Pfeiffer = *Saladelos commixta* Iredale.

SALADELOS COMMIXTA Iredale, 1933.

1933. *Saladelos commixta* Iredale, Rec. Austr. Mus., Vol. xix., p. 48, August 2. New name for
1934. *Helix splendidula* Pfeiffer, Proc. Zool. Soc. (Lond.), 1845, p. 128, February, 1846. East Australia (Ince) = Islands in Torres Strait. Figd. Pfeiffer, Syst. Conch. Cab. (Mart. & Chemn.), ed. Kuster, Bd. I. (2), figs. 1-3, 1851; Reeve, Conch. Icon., Vol. vii., *Helix*, pl. 150, sp. & fig. 973, February, 1853. Not *Helix splendidula* Gmelin, Syst. Nat., Vol. vi., p. 3655, 1791. North Queensland (Islands in Torres Strait).

SALADELOS LACERTINA Iredale, 1933.

(Plate xii., fig. 17.)

1933. *Saladelos commixta lacertina* Iredale, Rec Austr. Mus., Vol. xix., p. 48, August 2. Lizard Is., N.Q. (Macgillivray).
North Queensland (Lizard Island).

SALADELOS BENSA Iredale, 1933.

(Plate xii., fig. 22.)

1933. *Saladelos commixta bensa* Iredale, Rec. Austr. Mus., Vol. xix., p. 48, August 2. Ben Lomond, Port Denison, Queensland.
Mid Queensland.

SALADELOS MACQUARIENSIS COX, 1872.

1872. *Helix macquariensis* COX, Proc. Zool. Soc. (Lond.), 1871, p. 645, pl. 52, fig. 7, May 2, 1872. Port Macquarie, N.S.W.
New South Wales.

SALADELOS ? URARENSIS COX, 1866.

1866. *Helix urarensis* COX, Journ. de Conch., Vol. xix., p. 46, January 1; Proc. Zool. Soc. (Lond.), 1865, p. 696, April 24, 1866; Urara, Clarence River, N.S.W. (Macgillivray).
New South Wales (Clarence River).

Note.—There has been no reference to this shell since its description.

SALADELOS HOBSONI Brazier, 1876.

(Plate xii., fig. 19.)

1876. *Helix (Rhytida) hobsoni* Brazier, Proc. Linn. Soc. N.S.W., Vol. i., p. 99, July. Palm Island, North Queensland.
North Queensland (Palm Island).

SALADELOS HELMSIANA *sp. nov.*

(Plate xii., fig. 23.)

More strongly sculptured with radials above, resembling a miniature *Strangesta*, but ribs more rude, the under surface smooth, the umbilicus rather narrow, the mouth wide and spreading, but not descending. Coloration pale honey, shell thin. Size of type, breadth, 6 mm.; height, 3 mm., from Wilson's Valley, Mount Kosciusko, 5,000 feet.

South New South Wales (Mount Kosciusko).

Genus ECHOTRIDA Iredale, 1933.

1933. *Echotrída* Iredale, Rec. Austr. Mus., Vol. xix., p. 48, August 2. Orthotype, *Helix strangeoides* Cox.

ECHOTRIDA STRANGEOIDES COX, 1864.

1864. *Helix strangeoides* Cox, Cat. Austr. Land Shells, p. 20. Moreton Bay, Queensland. (R. L. King). Figd. Mon. Austr. Land Shells, p. 27, pl. xvii., fig. 3, May, 1868.
South Queensland. North New South Wales.

Genus TASMAPHENA Iredale, 1933.

1933. *Tasmaphena* Iredale, Rec. Austr. Mus., Vol. xix., p. 48, August 2. Orthotype, *Helix sinclairi* Pfeiffer.

TASMAPHENA SINCLAIRI Pfeiffer, 1845.

1845. *Helix sinclairi* Pfeiffer, Zeitschr., für. Malak., Vol. ii., p. 154 November. Van Diemen's Land = Hobart, S. Tasmania. Figd. Reeve, Conch. Icon., Vol. vii., pl. 205, figs. 1444a-b., December, 1854.

1854. *Helix bombycina* Reeve, Conch. Icon., Vol. vii., pl. 188, sp. 1314, July, ex Pfeiffer MS. (Proc. Zool. Soc. (Lond.), 1854, p. 55, January 10, 1855). Van Diemen's Land = S. Tasmania.
1871. *Helix (Patula) dubitans* Legrand, Coll. Mon. Tasm. Land Shells, sp. 29, pl. ii., fig. 7, June, ex Cox MS. North West Bay, S.E. Tasmania.
1871. *Helix (Patula) vexanda* Legrand, Coll. Mon. Tasm. Land Shells, pt. 43, June, ex Cox MS. North West Bay, S.E. Tasmania.
1871. *Helix (Patula) margatensis* Legrand, Coll. Mon. Tasm. Land Shells, sp. 54, June, ex Cox MS. North West Bay, S.E. Tasmania.
1871. *Helix (Videna) quaestiosa* Legrand, Coll. Mon. Tasm. Land Shells sp. 59, June, ex Cox MS. Oatlands, S. Tasmania. Tasmania.

Genus TASMADÉLOS *nov.*Type, *Helix nelsonensis* Brazier.

This genus differs from *Prolesophanta* in its more depressed form and its umbilicus; from *Saladelos* in its smaller size and sculpture.

TASMADÉLOS NELSONENSIS Brazier, 1871.

1871. *Helix (Hyalina) nelsonensis* Brazier, Proc. Zool. Soc. (Lond.), 1870, p. 661, April 1, 1871. Mount Nelson, Tasmania.
1871. *Helix (Paryphanta) fulgetrum* Legrand, Coll. Mon. Tasm. Land Shells, 1st ed., No. 31, pl. i. fig. 11, June; 2nd ed., No. 31, September, ex Cox MS. Brown's River, Tasmania. Tasmania.

Note.—The type locality is in South Tasmania and northern shells are larger, but with a narrower umbilicus; this may be named subspecifically *T. n. abitens subsp. nov.*, the type from Launceston measuring 4 mm. in breadth, and 2 mm. in height. (Pl. xii., fig. 21).

Genus STRANGESTA Iredale, 1933.

1933. *Strangesta* Iredale, Rec. Austr. Mus., Vol. xix., p. 48, August 2. Orthotype, *Helix leichardti* Cox.

STRANGESTA LEICHARDTI Cox, 1864.

1864. *Helix leichardti* Cox, Cat. Austr. Land Shells, p. 35, Australia (Leichardt) = Port Denison district Queensland. Figd. Cox, Mon. Austr. Land Shells, p. 25, pl. v., fig. 1, May, 1868. Mid Queensland (Port Denison district).

STRANGESTA PTYCHOMPHALA Reeve, 1852.

1852. *Helix ptychomphala* Reeve, Conch. Icon., Vol. vii., Helix, pl. 126, sp. 760, August, 1852, ex Pfeiffer MS. (Proc. Zool. Soc. (Lond.), 1851, pp. 98, 254, July 26, 1853). Port Essington. Error = Cape Upstart, Qld.
1855. *Helix confusa* Pfeiffer, Proc. Zool. Soc. (Lond.), 1855, p. 112, August 13, Cape Upstart, Queensland. Mid Queensland (Cape Upstart district).

STRANGESTA SHERIDANI Brazier, 1875.

1875. *Helix (Rhytida) sheridani* Brazier, Proc. Zool. Soc. (Lond.), 1875, p. 33, pl. iv., fig. 77a., June 1. Cardwell, North Queensland. North Queensland.

STRANGESTA CAPILLACEA Férussac, 1822.

1822. *Helix capillacea* Férussac, Hist. Moll. livr. 27, pl. 82, fig. 5, ex *Helix (Helicella) capillacea* Férussac, Tabl. Syst. Anim., Moll., p. 44, January; p. 40 June, 1821, *nom. nud.*, Port Jackson. New South Wales (Péron).
1849. *Helix strangei* Pfeiffer, Zeitsch. für Malak. Vol. v., June, 1848, p. 94, January, 1849; Proc. Zool. Soc. (Lond.), 1848, p. 108, April 25, 1849. Brisbane Water, New South Wales (Strange). Figd. Reeve, Conch. Icon., Vol. vii., *Helix*, pl. 79, sp. 416, March, 1852.
1884. *Amphidoxa lavinia* Hutton, Trans. New Zeal. Inst., Vol. xvi., 1883, p. 180, May, 1884. Palmerston, Wellington, New Zealand. Error = Sydney, New South Wales.
New South Wales (Sydney district, coastal).

STRANGESTA WALKERI Gray, 1834.

1834. *Zonites walkeri* Gray, Proc. Zool. Soc. (Lond.), 1834, p. 63, November 25, "70,000 paces from Fort Macquarie".
New South Wales (Hunter River district, inland).

STRANGESTA FRICATA Gould 1852.

1852. *Nanina fricata* Gould, United States Expl. Exped. (Wilkes), Vol. xii., p. 32; Atlas, pl. v., fig. 71, 1862. Illawarra, N.S.W.
New South Wales (Illawarra district).

STRANGESTA GLACIAMANS *sp. nov.*

(Plate xii., fig. 24.)

Related to *fricata* Gould, but with the sculpture less pronounced and the umbilicus wider. Breadth, 16 mm.; height, 9 mm. Wilson's Valley, 5,000 ft.

Southern New South Wales (Mount Kosciusko).

STRANGESTA GAWLERI Brazier, 1872.

1872. *Helix (Zonites) gawleri* Brazier, Proc. Zool. Soc. (Lond.), 1872, p. 618, November 3. Mount Lofty Ranges, South Australia. Figd. Kobelt, Syst. Conch. Cab. (Mart. & Chemn.), ed. Kuster, Bd. I., Abth. xii. B. Agnatha, p. 37, pl. 7, figs. 12-14 (dated 26/xii/1902). Figd. Cotton & Godfrey, South Austr. Nat., Vol. xiii., p. 176, pl. 3, fig. 20. August = September 30, 1932.
South Australia (Mount Lofty Ranges).

STRANGESTA TUMIDULA Iredale, 1937.

1937. *Strangesta tumidula* Iredale, South Austr. Nat., Vol. xviii., p. 55, pl. ii., fig. 7, September 30, ex Tate MS. Robe South Australia.
South Australia (South-east district). Victoria (South-west).

STRANGESTA HARRIETTAE COX, 1868.

1868. *Helix harriettae* Cox, Mon. Austr. Land Shells, p. 29, pl. xviii., figs. 9-9a, May. Richmond River, N.S.W.
New South Wales (Richmond River district).

STRANGESTA MAXIMA Mousson, 1869.

(Plate xiii., fig. 17.)

1869. *Zonites strangei* var. *maxima* Mousson, Journ. de Conch., Vol. xvii., p. 56, January. Brisbane, Moreton Bay (Dietrich).
South Queensland.

STRANGESTA BULLACEA Reeve 1854.

1854. *Helix bullacea* Reeve, Conch. Icon., Vol. vii., pl. 186, sp. 1288, July, ex Pfeiffer MS. (Proc. Zool. Soc. (Lond.), 1854, p. 53, January 10, 1855). Moreton Bay, Queensland (Strange). South Queensland.

STRANGESTA ASSIMILANS COX, 1864.

1864. *Helix assimilans* Cox, Cat. Austr. Land Shells, Add. p. no 135; Proc. Zool. Soc. (Lond.), 1864, p. 595, April 24. Clarence River New South Wales (MacGillivray). Figd. Cox, Mon. Austr. Land Shells, p. 26, pl. iv., fig. 11, and pl. ii., fig. 10. May, 1868.
1885. *Helix assimilis* Tryon, Man. Conch., Ser. ii., Vol. i., p. 124, error only. New South Wales (Clarence River district).

STRANGESTA LAMPRA Reeve, 1854.

1854. *Helix lampra* Reeve, Conch. Icon. Vol. vii., *Helix*, pl. 186, sp. 1295, July, ex Pfeiffer MS. (Proc. Zool. Soc. (Lond.), 1854, p. 53, January 10, 1855). Launceston, Tasmania (R. C. Gunn). North Tasmania.

STRANGESTA RUGA Legrand, 1871.

1871. *Helix (Videna) ruga* Legrand, Coll. Mon. Tasm. Land Shells, 1st ed., no 24, pl. i., fig. 5, June; 2nd ed., no 24, September, ex Cox MS. Mount Wellington, Tasmania.
1882. *Helix exoptata* Tate, Trans. Roy. Soc. South Austr. Vol. iv., p. 75, January. Dandenong and Cape Otway, Victoria, *nomen nudum*.
1912. *Helix exoptata* Cox & Hedley, Mem. Nat. Mus., Melb., No. 4, p. 7, February. As synonym of *H. ruga*. Tasmania. Victoria.

STRANGESTA LAMPROIDES COX, 1868.

1868. *Helix lamproides* Cox, Proc. Zool. Soc. (Lond.), 1867, p. 722, April 3, 1868. North West Coast, Tasmania. Figd. Cox, Mon. Austr. Land Shells, p. 28 pl. x., fig. 13, May, 1868. North West Tasmania.

Genus OCCIRHENEIA Iredale, 1933.

1933. *Occirheneia* Iredale, Rec. Austr. Mus., Vol. xix., p. 48, August 2. Orthotype, *Helix georgiana* Quoy & Gaimard.

OCCIRHENEIA GEORGIANA Quoy & Gaimard, 1832.

1832. *Helix georgiana* Quoy & Gaimard, Voy. Astrol. Zool., Vol. ii., p. 129, pl. x., figs. 26-30. King George's Sound South West Australia. South Western Australia.

Genus MURPHITELLA Iredale, 1933.

1933. *Murphitella* Iredale, Rec. Austr. Mus., Vol. xix., p. 49, August 2. Orthotype, *Helix franklandiensis* Forbes.

MURPHITELLA FRANKLANDIENSIS Forbes, 1851.

1851. *Helix franklandiensis* Forbes, Narr. Voy. Rattlesnake (MacGillivray), Vol. ii. p. 379, pl. ii., figs. 2a-b., "1852" = mid December, 1851. Frankland Islands, North Queensland.
1876. *Helix (Rhytida) jamesi* Brazier, Proc. Linn. Soc. N.S.W., Vol. i., p. 99, July. Palm Island, North Queensland. North Queensland (Palm. Is. to Frankland Islands).

MURPHITELLA FROGGATTI Iredale, 1933.
(Plate xii., fig. 20.)

1933. *Murphitella froggatti* Iredale, Rec. Austr. Mus., Vol. xix., p. 49, August 2, ex Brazier MS. Cairns, Queensland.
North Queensland (Cairns district).

MURPHITELLA BEDDOMEI Brazier, 1876.
(Plate xii., fig. 25.)

1876. *Helix (Rhytida) beddomei* Brazier, Proc. Linn. Soc. N.S.W., Vol. i., p. 98, July. Albany Is. and Cape York, Queensland.
North Queensland (Cape York district).

MURPHITELLA RAMSAYI COX 1868.

1868. *Helix ramsayi* Cox, Mon. Austr. Land Shells, p. 30, pl. xviii., figs. 11, 11a, May. Richmond River, N.S.W. (MacGillivray).
New South Wales (Richmond River district).

Genus NAMOITENA Iredale, 1933.

1933. *Namoitena* Iredale, Rec. Austr. Mus., Vol. xix., p. 49, August 2. Orthotype, *Helix namoiensis* COX.

NAMOITENA NAMOIENSIS COX, 1868.

1868. *Helix namoiensis* Cox, Mon. Austr. Land Shells, p. 29, pl. xviii. figs. 10, 10a, May. Namoi River, N.S.W. (Scott).
New South Wales (Namoi River district).

SLUGS.

I am placing the Slugs at this end, not because this is their systematic position, but because so little is known about them and their affinities, all experts disagreeing, that no general conchologist can understand the attempts at classification.

Thiele (Handb. syst. Weicht., teil 2, p. 485, 1931) placed our native slugs in his Ordo Stylommatophora, in the fourth Stirps, Tracheopulmonata. As his third Stirps was Succineacea and his fifth Achatinellacea the association appears absurd. This Stirps Tracheopulmonata includes only one family, the Athoracophoridae for New Zealand, Australian and some Island slugs.

We have also in North Australia some other slugs referable to *Prisma* and *Vaginula* s.l. and these Thiele referred to a Stirps Soleolifera, which preceded the Succineacea. Thiele recognised two families, Rathousiidae and Vaginulidae, placing *Prisma* as a section of *Atopos* in the former. The author of *Atopos* and *Prisma* described Australian species of *Vaginula*, very different looking slugs, which have been regarded as exotic, but these may be native. Under the circumstances I am merely recording the names and distribution of the species.

Family ANEITIIDAE.

Genus TRIBONIOPHORUS Humbert, 1863.

1863. *Triboniophorus* Humbert, Mem. Soc. Phys. & Hist. Nat., Geneve, Vol. xvii., pt. i., p. 116, figs. 2a-c. Haplotype, *Triboniophorus graeffei* Humbert.

TRIBONIOPHORUS GRAEFFEI Humbert, 1863.

1863. *Triboniophorus graeffei* Humbert, Mem. Soc. Phys. & Hist. Nat., Geneve, Vol. xvii. pt. i., pp. 116-120, pl. xii., fig. 2. Wollongong, N.S.W.

1865. *Triboniophorus schuttei* Keferstein, Zeitschr. für Zool., Vol. xv., p. 83, pl. 6. Sydney, N.S.W.
1865. *Triboniophorus krefftii* Keferstein, Zeitschr. für Zool., Vol. xv., p. 85, pl. 6; Add. p. 448, pl. 34, fig. 6. Sydney, N.S.W.
1893. *Aneitea graeffei*, var. *rosea* Hedley, Trans. New Zeal. Inst., Vol. xxv., p. 161, May. Bellendenker Mountains, Queensland.
- 190f *Triboniophorus brisbanensis* Pfeiffer, Zool. Jahrb. (Abth. f. Morph.), Bd. xiii., pp. 293-358, pl. 17-20. Brisbane, Queensland.
New South Wales (as far south as Wollongong). Queensland (as far north as Bellendenker Mountains).

Note.—Grimpe & Hoffmann (Zool. Anz. (Leipzig), Vol. 58, pp. 171-177, January 20, 1924) have transferred *brisbanensis* to *Aneitea* typical, which suggests it was an introduced specimen.

Family RATHOUSIIDAE.

Genus PRISMA Simroth, 1891.

1891. *Prisma* Simroth, Zeit. wiss. Zool. (Leipzig), Vol. lli., p. 596, October 2. Tautotype, *Veronicella prismatica* Tapp.-Canefri.
- PRISMA PRISMATICUM Tapparone-Canefri, 1883.
1883. *Veronicella prismatica* Tapparone-Canefri, Ann. Mus. Civ. Genova, Vol. xix., p. 207, pl. xi., figs. 6-8. Sorong Is., Dutch New Guinea.
1885. *Prisma prismaticum* Heyneman, Jahrb. deut. Malak. Gessell., 1885, p. 13, February 5. Islands of Torres Straits.
North Queensland.

PRISMA AUSTRALE Heyneman, 1876.

1876. *Vaginulus australis* Heyneman, Journal Mus. Godeff., Vol. xii., p. 159. Gayndah, Burnett River, South Queensland.
1917. ? *Atopos (Prisma) australis* Odhner, Kungl. Sv. Vet. Akad. Handl., Bd. 52, No. 16, p. 90, pl. 3, figs. 99-100, text figs. 45-51, Herberton, North Queensland.
Queensland.

Family VAGINULIDAE.

Grimpe & Hoffmann have published a revision of the Indo-Pacific Vaginulids, and have created for them four genera, *Meisenheimeria*, *Vanigula*, *Semperula* and *Sarasinula*. The Australian recorded species are here mentioned under their names.

Genus MEISENHEIMERIA Grimpe & Hoffmann, 1924.

1924. *Meisenheimeria* Grimpe & Hoffmann, Zool. Anz. (Leipzig), Vol. 58, p. 177, January 20; Zeitsch. Wiss. Zool. (Leipzig), Vol. 124 pp. 1-50, February 10, 1925. Orthotype, *M. frauenfeldi* Semper.

MEISENHEIMERIA LEYDIGI Simroth, 1889.

1889. *Vaginula leydigi* Simroth, Zool. Anz. (Leipzig), Vol. xii., p. 551, October 24. (Brisbane) Queensland. Abstr. in Journ. Roy. Micros. Soc., Ser. vi., Vol. x., p. 21, February, 1890.
Queensland.

Note.—Grimpe & Hoffmann (*loc. cit.*) have recorded this name as a synonym of *alte* Férussac, which they regard as ranging from India through the islands to South Queensland, and all similar slugs are considered to be conspecific.

Genus SARASINULA Grimpe & Hoffmann, 1924.

1924. *Sarasinula* Grimpe & Hoffmann, Zool. Anz. (Leipzig), Vol. 58, p. 177, January 20; Zeitschr. Wiss. Zool. (Leipzig), Vol. 124, pp. 1-50, February 10, 1925. Orthotype, *Vaginulus plebeius* Fischer.

SARASINULA HEDLEYI Simroth, 1889.

1889. *Vaginula hedleyi* Simroth, Zool. Anz. (Leipzig), Vol. xii., p. 552, October 24. Brisbane (Queensland). Abstr. in Journ. Roy. Micros. Soc., Ser. vi., Vol. x., p. 21, February, 1890. Queensland.

Note.—Grimpe & Hoffmann (*loc. cit.*) have subordinated this to the New Caledonian *V. plebeius* of Fischer (Journ. de Conch., Vol. xi., p. 145, April 1, 1868).

While this was passing through the press I received an article published on the 10th February, 1938, in the Journal of Conchology entitled "Some New Australian *Thersites*", pp. 20-24, with one plate. It is a startling production as no reference to literature later than 1894 appears in it, and the authors, Clench and Archer, seem very unfamiliar with Australian shells. I have often wondered how an article written on American or European molluscs by means of the Australian Museum collection alone would be received in the countries concerned. Curiously, the Queensland molluscan fauna is so large that by the law of chances one of their five "new" species survives. The use of the generic "*Thersites*" for the different shells figured must look ridiculous to every conchologist who glances at the plate.

p. 20.—*Thersites darlingtoni* (MacPherson Range) is the same as my *Annakelea tympanum* (Austr. Zool., Vol. ix., p. 38, November 12, 1937, pl. iii., fig. 25) from the same locality. In this case there is excuse as though the species had long been known, it was described almost at the same time as its synonym.

p. 21.—*Thersites pterinus* (Lake Barrine) is not compared with *Gnarosophia bellendenkerensis*, though its sculpture is correctly given. While this may later be regarded as a race of *Gnarosophia*, it has no close relationship whatever with *Varohadra rainbirdi* with which its authors associated it.

p. 21.—*Thersites trachydermon* (Cardwell district) is obviously *Spurlingia nicomede*, but has nothing to do with *beddomae*, which is a *Gnarosophia*.

p. 22.—*Thersites monticola* (50 miles N.W. of Cairns) is apparently *Spurlingia portus*, which was described almost simultaneously.

p. 23.—*Thersites schevilli* (Hughenden district) is apparently a valid species of *Sinumelon*.

p. 24.—A note re *Chloritis banneri* with a figure (Plate i., fig. 6) is given, but I had discussed this species some years ago, and an excellent figure was on record in Cox's Monograph.

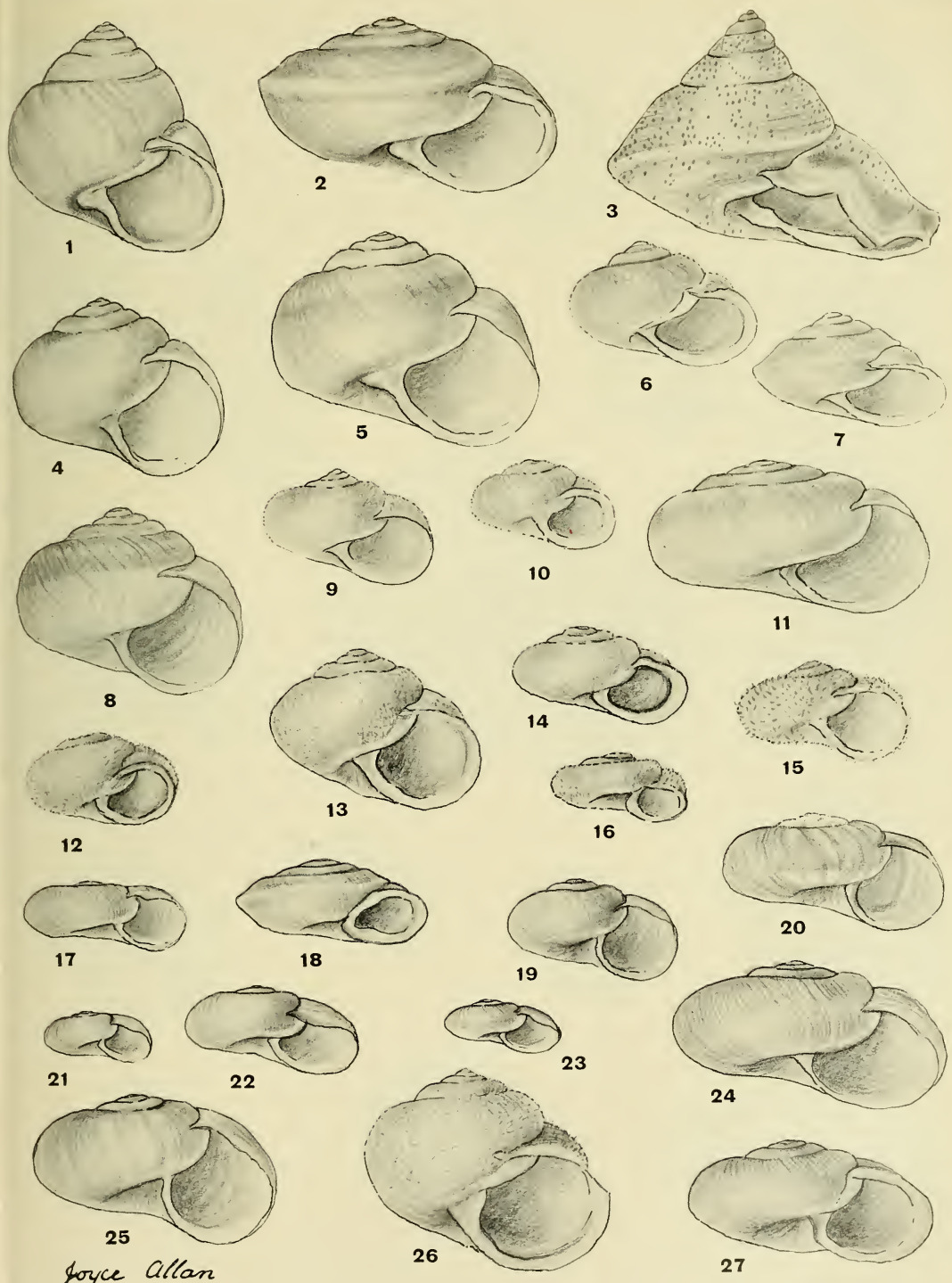
EXPLANATION OF PLATE XII.

- Fig. 1. *Meridolum ascensum* Iredale.
 ,, 2. *Meridolum depressum* Hedley.
 ,, 3. *Rhynchotrochus macgillivrayi extensor* Iredale.
 ,, 4. *Galadistes liverpoolensis* Brazier.
 ,, 5. *Galadistes bourkensis* Smith.
 ,, 6. *Austrochloritis fringilla* Iredale.

- „ 7. *Ventopelita bellengerensis* Cox.
- „ 8. *Galadistes intervenens* Iredale.
- „ 9. *Austrochloritis metuenda* Iredale.
- „ 10. *Austrochloritis blighiana* Iredale.
- „ 11. *Discomelon intricatum* Iredale.
- „ 12. *Austrochloritis senticula* Iredale.
- „ 13. *Austrochloritis separanda* Iredale.
- „ 14. *Austrochloritis buxtoni* Brazier.
- „ 15. *Mussonena campbelli* Iredale.
- „ 16. *Offachloritis dryanderensis* Cox.
- „ 17. *Saladelos lacertina* Iredale.
- „ 18. *Trozena morata* Iredale.
- „ 19. *Saladelos hobsoni* Brazier.
- „ 20. *Murphitella froggatti* Iredale.
- „ 21. *Tasmadelos nelsonensis abitens* Iredale
- „ 22. *Saladelos bensa* Iredale.
- „ 23. *Saladelos helmsiana* Iredale.
- „ 24. *Strangesta glaciamans* Iredale.
- „ 25. *Murphitella beddomei* Brazier.
- „ 26. *Gloreugenia blackalli* Brazier.
- „ 27. *Torresitrachia stipata* Iredale.

EXPLANATION OF PLATE XIII.

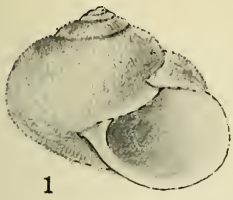
- Fig. 1. *Gloreugenia carduelis* Iredale.
- „ 2. *Xanthomelon interpositum* Iredale.
 - „ 3. *Xanthomelon pachystylum sagenatum* Iredale.
 - „ 4. *Xanthomelon pachystylum* Pfeiffer.
 - „ 5. *Sinumelon marshalli* Iredale.
 - „ 6. *Sinumelon finitimum* Iredale.
 - „ 7. *Sinumelon subfodinale* Iredale.
 - „ 8. *Xanthomelon pachystylum noscitum* Iredale.
 - „ 9. *Xanthomelon pachystylum magnidicum* Iredale.
 - „ 10. *Xanthomelon jannellei* Le Guillou.
 - „ 11. *Xanthomelon genetivum lubricum* Iredale.
 - „ 12. *Torresitrachia glomerans* Iredale.
 - „ 13. *Xanthomelon minusculum* Iredale.
 - „ 14. *Xanthomelon genetivum* Iredale.
 - „ 15. *Sinumelon simulante* Iredale.
 - „ 16. *Xanthomelon distractum* Iredale.
 - „ 17. *Strangesta maxima* Mousson.
-



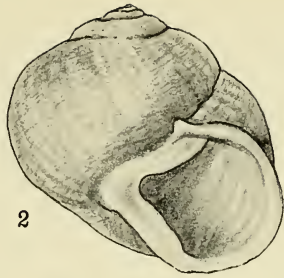
Joyce Allan

AUSTRALIAN LAND SHELLS.

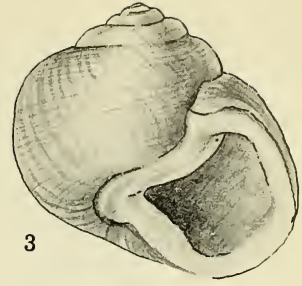
Joyce Allan, del.



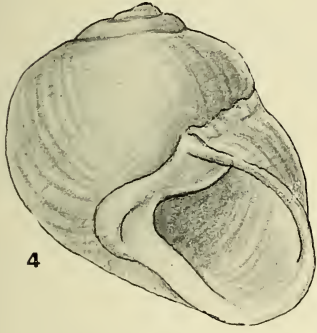
1



2



3



4



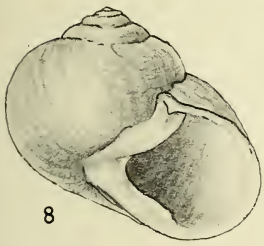
5



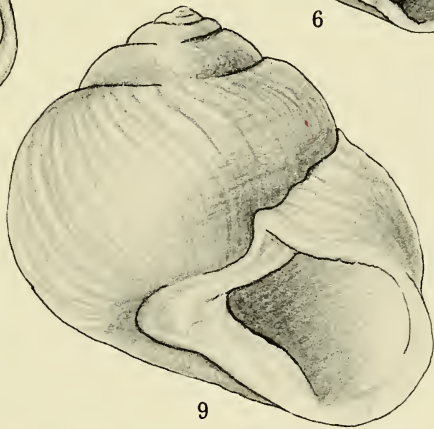
6



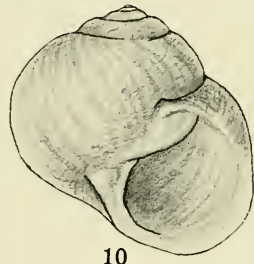
7



8



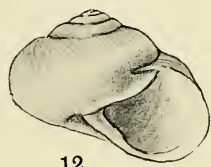
9



10



11



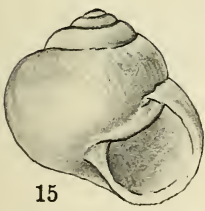
12



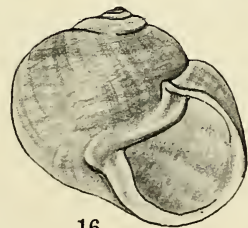
13



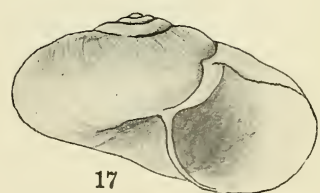
14



15



16



17

Joyce Allan

Joyce Allan, del.

AUSTRALIAN LAND SHELLS.